

CITY AND COUNTY OF SAN FRANCISCO
DEPARTMENT OF CITY PLANNING

DRAFT

84.41 E

HILLS PLAZA

HILLS BROS. COFFEE, INC. WORLD HEADQUARTERS

ENVIRONMENTAL IMPACT REPORT

DOCUMENTS DEPT.

DEC 17 1984

SAN FRANCISCO
PUBLIC LIBRARY

PUBLICATION DATE: DECEMBER 7, 1984

PUBLIC HEARING DATE: JANUARY 10, 1985

PUBLIC COMMENT PERIOD: DECEMBER 7, 1984 TO JANUARY 22, 1985

WRITTEN COMMENTS SHOULD BE SENT TO
THE ENVIRONMENTAL REVIEW OFFICER
450 McALLISTER STREET, SAN FRANCISCO, CA 94102



5/S

SAN FRANCISCO
PUBLIC LIBRARY

REFERENCE
BOOK

Not to be taken from the Library



DATE: December 7, 1984

TO: Distribution List for the Hills Plaza Project Draft EIR

FROM: Alec S. Bash, Environmental Review Officer

RE: Request for the Final Environmental Impact Report for the Hills Plaza Project

This is the draft of the Environmental Impact Report for the Hills Plaza Project. A public hearing will be held on the adequacy and accuracy of this document. After the public hearing, our office will prepare and publish a document titled "Summary of Comments and Responses" which will contain a summary of all relevant comments on this draft EIR and our responses to those comments. It may also specify changes to this draft EIR. Those who testify at the hearing on the draft will automatically receive a copy of the Comments and Responses document along with notice of the date reserved for certification (in this case, probably about 8 to 10 weeks after the hearing on the draft); others may receive such copies and notice on request or by visiting our office. This draft EIR together with the Summary of Comments and Responses document will be considered by the City Planning Commission in an advertised public meeting and certified as a final EIR.

After certification, we will modify the draft EIR as specified by the Comments and Responses document and print both documents in a single publication called the Final Environmental Impact Report. The final EIR will add no new information to the combination of the two documents except to reproduce the certification resolution. It will simply provide the information in one rather than two documents. Therefore, if you receive a copy of the Comments and Responses document in addition to this copy of the draft EIR, you will technically have a copy of the final EIR.

We are aware that many people who receive the draft EIR and Summary of Comments and Responses have no interest in receiving virtually the same information after the EIR has been certified. To avoid expending money and paper needlessly, we would like to send copies of the final EIR to private individuals only if they request them.

If you want a copy of the final EIR, please so indicate in the space provided on the next page and mail the request to the Office of Environmental Review within two weeks after certification of the EIR. Any private party not requesting a final EIR by that time will not be mailed a copy. Public agencies on the distribution list will automatically receive a copy of the final EIR.

Thank you for your interest in this project.

**PLACE
POSTAGE
HERE**

Department of City Planning
Office of Environmental Review
450 McAllister Street, 5th Floor
San Francisco, CA 94102
Attn. Paul Maltzer, OER Coordinator
84.41E Hills Plaza

CUT ALONG DOTTED LINE

RETURN REQUEST REQUIRED FOR FINAL ENVIRONMENTAL IMPACT REPORT

REQUEST FOR FINAL ENVIRONMENTAL IMPACT REPORT

To: Department of City Planning,
Office of Environmental Review

Please send me a copy of the Final EIR.

Signed: _____

Print Your Name and Address Below

--

CITY AND COUNTY OF SAN FRANCISCO
DEPARTMENT OF CITY PLANNING

DRAFT

84.41 E

HILLS PLAZA

HILLS BROS. COFFEE, INC. WORLD HEADQUARTERS

ENVIRONMENTAL IMPACT REPORT

PUBLICATION DATE: DECEMBER 7, 1984

PUBLIC HEARING DATE: JANUARY 10, 1985

PUBLIC COMMENT PERIOD: DECEMBER 7, 1984 TO JANUARY 22, 1985

WRITTEN COMMENTS SHOULD BE SENT TO
THE ENVIRONMENTAL REVIEW OFFICER
450 McALLISTER STREET, SAN FRANCISCO, CA 94102

D REF 711.5524 H559d

Hills Plaza : Hills
Bros. Coffee, Inc.
1984.

3 1223 03565 1109

S.F. PUBLIC LIBRARY

HILLS PLAZA DRAFT EIR (84.41E)
TABLE OF CONTENTS

	<u>Page</u>
I. SUMMARY	1
II. PROJECT DESCRIPTION	17
A. Project Background and Sponsor's Objectives	17
B. Project Location	17
C. Existing On-Site Uses	19
D. Project Characteristics	19
E. Project Schedule, Phasing and Cost	34
F. Approval Requirements	36
III. ENVIRONMENTAL SETTING	39
A. Land Use and Zoning	39
B. Architectural Resources, Urban Design and Visual Quality	50
C. Shadows	54
D. Historic and Archaeological Resources	55
E. Transportation, Circulation and Parking	57
F. Air Quality	62
G. Employment and Housing Factors	64
IV. ENVIRONMENTAL IMPACTS	71
A. Land Use and Zoning	71
B. Architectural Resources, Urban Design and Visual Quality	76
C. Shadows	84
D. Historic and Archaeological Resources	98
E. Transportation, Circulation and Parking	98
F. Air Quality	138
G. Energy	144
H. Employment and Housing Factors	152
I. Cumulative Police and Fire Protection Services	162
J. Growth Inducement	163
V. MITIGATION MEASURES WHICH WOULD MINIMIZE THE POTENTIAL IMPACTS OF THE PROJECT	165
VI. SIGNIFICANT ENVIRONMENTAL EFFECTS THAT CANNOT BE AVOIDED IF THE PROPOSED PROJECT IS IMPLEMENTED	181
VII. THE RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF MAN'S ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY	182
VIII. ANY SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES WHICH WOULD BE INVOLVED IN THE PROPOSED ACTION SHOULD IT BE IMPLEMENTED	183
IX. ALTERNATIVES TO THE PROPOSED PROJECT	184
A. Rincon Hill Plan Alternative	184
B. Residential Alternative	195
B.1 Residential/Retail Alternative Variant	199
C. All Office Alternative	201
D. No-Project Alternative	204

TABLE OF CONTENTS (Continued)

	<u>Page</u>
X. EIR AUTHORS AND CONSULTANTS; ORGANIZATIONS AND PERSONS CONSULTED	207
XI. DISTRIBUTION LIST	210
XII. APPENDICES	A-1

LIST OF TABLES

1. Floor Area by Proposed Use	20
2. Project Characteristics	35
3. Relationship Between Proposed Project and Applicable Urban Design Policies of the San Francisco Comprehensive Plan	78
4. Estimated Outbound Travel Demand By Mode From the Project	101
5. Peak 15-Minute Pedestrian Flow Conditions	104
6. Existing and Projected Muni 32-Embarcadero Demand and Level of Service in Project Vicinity During P.M. Peak-Hour	105
7. Comparison of List Method and Economic Forecast Method - Outbound P.M. Peak-hour Cumulative Travel Demand For the C-3 District	114
8. Outbound Regional Transit Demand and Level of Service	118
9. Projected Peak-Hour Intersection Volume to Capacity Ratios (V/C) and Levels of Service (LOS)	123
10. Outbound Regional Auto Demand	126
11. Parking Requirements for the Project	129
12. Service Vehicle Travel Attributable to the Project	133
13. Projected Daily Pollutant Emissions	139
14. Existing and Projected Curbside Carbon Monoxide Concentrations at Selected Intersections	141
15. Estimated Project Energy Use	146
16. Projected Permanent Employment at the Project Site	153
17. Summary of Alternatives Descriptions	185
18. Comparison of Proposed Project and Alternative A with the Rincon Hill Plan (June 1984) Office/Industrial District	187

TABLE OF CONTENTS (Continued)

Page

LIST OF FIGURES

1.	Project Location	18
2.	Photograph of Project Model	22
3.	Lower Level Basement Parking	23
4.	Upper Level Basement Parking	24
5.	Ground-Floor Plan	25
6.	Second-Floor Plan	26
7.	Sixth-Floor Plan	27
8.	Seventh-Floor and Typical Residential Floor Plan	29
9.	Spear Street Elevation	30
10.	Steuart Street Elevation	31
11.	Site Plan of Existings Buildings	40
12A.	View of Project Site on Spear Street	41
12B.	View of Project Site From Spear and Folsom Streets	42
12C.	View of Project Site on Spear Street Near Harrison Street	43
13.	Existing Land Use	45
14.	Proposed Development and Plan Areas in the Project Vicinity	46
15.	Planning Code Use Districts; and Planning Code Height and Bulk Districts	49
16.	View of Landmark Building From Spear and Harrison Streets	52
17.	Muni and Bart Routes in the Project Vicinity	60
18A.	View of Project From The Embarcadero (Looking South)	81
18B.	View of Project From Folsom Street (Looking East)	82
18C.	View of Project From Spear Street (Looking North)	83
19.	Proposition K Shadow Analysis	85
20A.	Off-Site Shadows in Project Vicinity - March 20	87
20B.	Off-Site Shadows in Project Vicinity - June 21	88

TABLE OF CONTENTS (Continued)

	<u>Page</u>
20C. Off-Site Shadows in Project Vicinity - September 22	89
20D. Off-Site Shadows in Project Vicinity - December 21	90
21A. On-Site Shadows - March 20	94
21B. On-Site Shadows - June 21	95
21C. On-Site Shadows - September 22	96
21D. On-Site Shadows - December 21	97
22. Projected Electricity Consumption	147
23. Projected Natural Gas Consumption	148
24. Rincon Hill Plan Alternative	190
25. Residential Alternative	196
26. All Office Alternative	202

I. SUMMARY

A. PROJECT DESCRIPTION (Pages 17-38)

Hills Bros. Coffee, Inc. (Hills) proposes to rehabilitate and convert into office use the existing Two Harrison St. building, a designated City landmark; demolish the remaining buildings and parking lot on the site; and construct a mixed-use (office, residential, retail, basement parking and open space) project on the remainder of the site. The sponsor's objectives are to retain Hills' world headquarters in San Francisco at its current location; preserve the architecture of the noted landmark building and develop the building as quality offices; provide modernized, more energy efficient office space for Hills' administrative offices; and develop quality new construction so as to maximize the economic value of the site. The project has been designed to be consistent with the policies and objectives of the proposed Rincon Hill Plan sponsored by the Department of City Planning.

The proposed project would occupy Lot 1 on Assessor's Block 3744, the entire City block bounded by Harrison, Steuart, Folsom, and Spear Sts. The 151,250-sq.-ft. site is at the foot of Rincon Hill, just within the eastern edge of the proposed Rincon Hill Plan area. The project site is in an M-1 (Light Industrial) district immediately adjacent to the Folsom St. boundary of the C-3-S, Downtown Support District.

The site currently contains seven buildings and 55 surface-level parking spaces, all of which are owned and used by Hills. The landmark building would be retained as part of the project; the remaining six buildings and surface parking spaces would be demolished. Existing coffee manufacturing, production and packaging uses at the site are currently being consolidated with operations at the existing Hills coffee plant at Mariposa and Arkansas Sts. in San Francisco. This consolidation is expected to be completed by the end of 1985.

The project would rehabilitate and convert the landmark building into all office use, totaling about 217,000 gross sq. ft. of office space with 33,000 gross sq. ft. of parking

in the existing basement. New construction would include about 370,000 gross sq. ft. of office space; 40,000 gross sq. ft. of ground-level, support-retail space; 100,000 gross sq. ft. of residential space (85 units); and 167,000 gross sq. ft. of parking located in one basement level under the new construction. Net changes in floor area by use would be an increase of about 524,600 gross sq. ft. of offices; a decrease of about 274,400 gross sq. ft. of coffee manufacturing space; and an addition of about 100,000 gross sq. ft. of residential space, 40,000 gross sq. ft. of retail space, 167,000 gross sq. ft. of basement parking, 38,000 gross sq. ft. of public open space, and 17,000 sq. ft. of common residential open space.

Vehicles would enter the garage on Folsom St. and exit onto Spear St. The project would contain a total of 410 parking spaces. Enclosed, off-street loading would be provided on the ground-level of the new construction by four truck loading and two van spaces, accessed from Spear St. near Folsom St. The sponsor would request approval of two curbside loading spaces on Harrison St. or Spear St. to serve the landmark building.

The new construction would consist of three building elements: a six-story base containing an interior plaza, ground-level retail, and five floors of offices; a seven-story building element mid-block on Spear St. rising one story above the base, and containing offices; and a stepped tower rising eleven stories above the base at the corner of Spear and Folsom Sts., containing residences. The base would be 84 ft. tall. The building element mid-block on Spear St. would be 105 ft., above which would be two mechanical penthouse levels (49 ft.), rising to a total height of 155 ft. Above the 200 ft. residential tower would be a 26 ft. mechanical penthouse, for a total height of 226 ft. Setback from the Steuart St. frontage of the new construction would be a one-level, 19-ft. mechanical penthouse, rising to a total height of 124 ft.

The 84-ft.-tall landmark building is six-stories, and is flanked to the north by a 174-ft.-tall, pitched-roof tower in the style of a campanile. The exterior of the landmark building would be altered as part of the project, including removal of fire escapes and metal canopies along the Spear St. facade, and the creation of an arched opening at the base of the tower to provide public access to the landmark building.

Approximately 38,000 gross sq. ft. of publicly accessible open space would be provided, 31,000 in a mid-block plaza and 7,000 in sidewalk arcades. The mid-block (east-west)

plaza would be located between the new construction and the landmark building, and would fan out to the Steuart St. frontage of the project block. The mid-block plaza and sidewalk arcade on Steuart St. would direct pedestrian flows to the corner of Steuart and Folsom Sts., providing a pedestrian link from Rincon Hill to The Embarcadero and the waterfront.

The sponsor expects project review and detailed design to be complete by early 1985. Project development would occur in two phases, with the new construction occurring in Phase 1, and the rehabilitation of the landmark building in Phase 2. The total construction period would be about 36 months. Initial occupancy of the new construction is expected by late 1987 and of the landmark building by late 1988.

B. MAIN ENVIRONMENTAL EFFECTS (Pages 71-164)

INITIAL STUDY

An Initial Study was prepared for the project to identify potential environmental impacts. Those issues are summarized below. Certain potential environmental impacts were determined in the Initial Study to be insignificant and are therefore not addressed in this EIR. These include: light and glare, employment and housing displacement, noise, construction air quality, wind, public services and utilities (except for cumulative fire protection services), biology, geology/topography, water and hazards. A copy of the Final Initial Study is attached to this report as Appendix A, p. A-2.

Because of the project's mix of uses and its location on the border of two proposed planning areas, each with its distinct goals, uses and characteristics (the Downtown Plan, A Proposal for Citizen Review, August 1983, and the Rincon Hill Plan, A Proposal for Citizen Review, June 1984), the project's effects on traffic circulation, trip generation, office space demand, employment, housing demand and growth inducement would occur in both planning areas. Accordingly, in analyzing the potential environmental effects of the project, this EIR has drawn upon methodologies and analyses from both the Downtown EIR and the Rincon Hill Plan Draft EIR to the extent that information contained in these reports is appropriate.

LAND USE AND ZONING (Pages 71-76)

The project would be the first major mixed-use development in the Rincon Hill Plan area. This introduction of additional office, and new residential and retail space at the site would continue the trend towards diversification of land uses from light industrial uses in the South of Market area. This shift to mixed-use development in the Rincon Hill Plan area has been foreseen and is encouraged in the Northeastern Waterfront and Residence Elements of the San Francisco Comprehensive Plan and the proposed Rincon Hill Plan.

The site is in an M-1 (Light Industrial) district and a 105-F Height and Bulk district. Under the existing City Planning Code, the project would need a Conditional Use authorization as a Planned Unit Development with exceptions to bulk limits for new construction; for construction of a residential use in an M-1 district; and for a parking space deficit of 565 spaces. Under the existing code, a Certificate of Appropriateness also would be required for exterior alteration of the landmark building. The residential tower would require a height reclassification from the existing 105 ft. district. In addition, height reclassifications would be required to accommodate the three mechanical penthouses of the project, all of which exceed the 16 ft. height limit under Section 260(b) 1(a) of the existing City Planning Code.

Revisions to the mechanical penthouse requirements of the Draft Rincon Hill Plan are currently under consideration by the Department of City Planning; thus, height reclassifications may or may not be required for the mechanical penthouses, depending upon the adopted controls. The project would still require a Certificate of Appropriateness and Conditional Use authorization under the Rincon Hill Plan.

The project would conform to the general objectives of the San Francisco Comprehensive Plan including applicable policies of the Commerce and Industry Element, Recreation and Open Space Element, and the Northeastern Waterfront Element of the Comprehensive Plan. The project would conform to applicable policies of the Residence Element of the Comprehensive Plan except for those policies encouraging the provision of "affordable" housing in new developments.

ARCHITECTURAL RESOURCES, URBAN DESIGN AND VISUAL QUALITY (Pages 76-84)

The project would demolish the six buildings on site; none of these buildings are rated by the Foundation for San Francisco's Architectural Heritage (Heritage), nor are they rated

by the Department of City Planning's (DCP) 1976 City-wide Architectural Survey. The existing Hills landmark (including the tower portion), which would be retained, features romanesque architecture and ornate brick detail. The landmark building was given a rating of "3" by DCP, and a preliminary rating of "A" by Heritage. The project would be intended to provide a visual transition between the generally low-rise buildings in Rincon Hill and the high-rise buildings in the Downtown Financial district and in the South of Market between Mission and Folsom Sts. The proposed mid-block plaza would create new public open space and provide a pedestrian link between Rincon Hill and the waterfront shoreline. The location and configuration of the plaza also would create new pedestrian level views of the tower portion of the landmark building. The project would be visible from the eastern approach of the Bay Bridge. At street level from the northwest within one to two blocks of the site, the base and residential tower would reduce and eliminate some southeastern views of the Bay Bridge. The project would reduce some long-range views of the Bay Bridge and the Bay from the upper floors of high-rise buildings to the north and northwest.

SHADOWS (Pages 84-97)

No recreation area under the jurisdiction of, or proposed for acquisition by, the Park and Recreation Department would be affected by project shadows; therefore the provisions of Proposition K, the Park Shadowing Initiative, would not be applicable to the project.

The net new off-site shadows created by the project would occur primarily on adjacent streets and sidewalks and on surface-level parking lots northeast and northwest of the site. During the late afternoon (3:00-4:30 p.m.) in December through March, the project would shade portions of the shoreline promenade, east of The Embarcadero. No portion of the promenade would be affected by the project during the noon hour at any time of year. This promenade is under the jurisdiction of the Port of San Francisco, and is used mostly during the midday hours by joggers and brown baggers who work nearby. The promenade extends from the Ferry Building south to Harrison St. The project would contribute shading only to those portions of the promenade, roughly between Folsom and Harrison Sts.; this area represents about 25% of the entire length of the promenade.

On-site shadows from the landmark building and proposed new construction would shade the mid-block plaza, private terraces for office workers, and private open space for

project residents. From noon to 3:00 p.m. during all times of the year most of the shading of the mid-block plaza would be by the existing landmark building.

In the late afternoon during fall, winter and spring (September through March), the project could add shadows to portions of an area proposed for a 4-1/2 acre park site in the Rincon Point - South Beach Redevelopment Plan. This site extends east of the project site to the shoreline, roughly between Howard and Harrison Sts. No specific plans have been developed for this potential site; only the general boundaries are known. Development and final boundaries of the site will depend on several transit improvements proposed for The Embarcadero, which may be funded under the I-280 Transfer Concept Program.

HISTORIC AND ARCHAEOLOGICAL RESOURCES (Page 98)

It is possible that one or more ship hulks from the Gold Rush could be encountered within or immediately adjacent to the project site during construction. A review of available archival material, however, indicates that this would be unlikely. The foundations of two structures depicted on the site in the 1853 U.S. Coast survey map may be below the surface of the site. If these two structures were to be discovered during project construction, it could represent a potentially significant archaeological find.

TRANSPORTATION, CIRCULATION AND PARKING (Pages 98-137)

No sidewalk closures, or street or lane closures or detours would be necessary during project construction. Demolition and excavation would each generate an average of 35 to 40 truck round trips per day, with an estimated maximum of between 50 and 60 per day. No substantial traffic effects are expected as a result of cumulative construction activities.

The Hills Plaza project would generate about 14,400 net new person trips per day. About 1,800 new outbound trips would occur during the p.m. peak period, 1,100 of these during the p.m. peak hour.

The project would provide about 410 parking spaces on site. Estimated parking demand from the project would be about 620 spaces, resulting in an unmet demand of 210 spaces.

The proposed project would generate about 650 new pedestrian trips on the surrounding sidewalks during the noon 15-minute peak period and about 600 new pedestrian trips during the p.m. 15-minute peak period. Sidewalk operations, currently in the "open" range at all locations around the Hills Plaza site during both the noon hour and p.m. peak hour, would be no worse than "unimpeded" with the addition of anticipated pedestrian trips from the project.

The project would add about 390 outbound trips to Muni, 200 trips to BART, and 280 new outbound trips to other transit agencies during the p.m. peak period. The project would generate an annual cost deficit to Muni of about \$98,300, which would be offset through its contributions to the General Fund, the Transit Development Impact Fee, and sales tax revenues. The project would result in an annual net operating deficit to BART of about \$332,800. BART's operating deficit per passenger is likely to decline in real terms as planned service improvements become operational in the future.

Cumulative transportation impacts have been calculated by a development-list-based method used in most past San Francisco EIRs and by the forecast methodology first presented in the Downtown Plan EIR, certified October 18, 1984. The two methods are not directly comparable because the Downtown Plan EIR method forecasts probable employment growth and space growth for all uses in the C-3 Districts of downtown, with a more general projection of transportation and air quality effects for non-C-3 areas, for the 1984-2000 time frame, while the list-based method covers specific projects in a larger area of downtown but is limited to similar office and retail projects and covers a more limited time frame. In addition, the Downtown Plan EIR methodology accounts for changes in residential distribution of travel and in travel mode (e.g. auto versus transit) while the list-based analysis assumes no change in the regional distribution of trips or in the travel modes used by commuters.

Both methods show greatest cumulative transportation impacts on Muni and BART, although the list-based method shows more trips on Muni while the Downtown Plan EIR forecast method shows higher results on BART. This difference between the two methods is largely due to differences in 1) the time frames for which the projections were made; 2) assumptions about San Francisco and regional residence patterns; and 3) roadway/transit capacity availability assumptions.

The transit demand from the project would represent about 0.5% of the total transit demand in the year 2000. Cumulative development under the Downtown Plan to the year

2000 in conjunction with planned capacity increases of transit carriers would be expected to cause the following changes in transit levels of service during the peak period: Muni Northeast Corridor - D to C, BART Transbay - F to E, AC Transit - C to D, Golden Gate Ferry - B to A, Tiburon Ferry - B to C, and CalTrain - B to C.

About 0.2% of year 2000 Bay Bridge peak-period demand would be due to the project. The project also would represent about 0.2% of peak-period demand on the Golden Gate Bridge, 0.3% on US 101 (south of Harney Way), and on I-280 (between Alemany Boulevard and San Jose Avenue).

Cumulative development, including that from the proposed project, by the year 2000 would be expected to further exacerbate the existing peak-hour traffic Level of Service (LOS) "F" conditions at the First and Harrison St. and Mission and Beale Sts. intersections. Conditions at the four intersections surrounding the project block would operate at LOS "A" or "B".

The November 1984 amendments to the City Planning Code (to implement the Downtown Plan) would not change loading requirements for the project site from those in the existing City Planning Code. The project would provide four off-street truck loading and two van spaces (the equivalent of five truck loading spaces). The project would exceed the off-street loading space requirements of the existing City Planning Code by one space. Under City Planning Code Resolution No. 9286, the project would have to provide as mitigation six off-street spaces. To meet the intent of Resolution No. 9286, the sponsor would provide the equivalent of five spaces in the new construction, and request approval for a 70-ft.-long curbside loading space (the equivalent of two spaces) on Harrison St. or Spear St. to serve the landmark building. The provision of on-street loading for the landmark building would not meet the intent of Resolution No. 9286.

Under the existing City Planning Code, the project would have a parking requirement of about 975 spaces, resulting in a deficit of about 565 spaces. In the current draft of the proposed Rincon Hill Plan, the project's parking requirement would be about 490, resulting in a deficit of 80 spaces.

AIR QUALITY (Pages 138-143)

Project-related vehicular traffic would add to cumulative regional pollutant emissions. Emissions of total suspended particulates (TSP) generated by the project and cumulative

development would increase TSP concentrations, which could increase the frequency of TSP standard violations in San Francisco, with concomitant health effects and reduced visibility. Currently, the eight-hour CO standard is estimated to be exceeded at the Steuart/Harrison/The Embarcadero intersection and at the Beale/Mission intersection.

However, CO concentrations are predicted to be less in 1990 and 2000 than in 1984, and would not exceed the standards. Cumulative downtown development is projected by the Downtown Plan EIR potentially to result in violations of the eight-hour CO standard at the Brannan/Sixth intersection.

ENERGY (Pages 144-152)

Site development, fabrication and transportation of building materials, worker transportation, and building construction would require about 1.2 trillion Btu of gasoline, diesel fuel, natural gas, and electricity. The project would consume about 92.2 billion Btu annually, the equivalent of about 16,465 barrels of oil.

EMPLOYMENT AND HOUSING FACTORS (Pages 152-162)

After completion, the project would provide a total of about 2,240 permanent full-time jobs, a net increase of 2,065 jobs for the site, after subtracting the existing 175 Hills headquarters employees that would remain on the site. About 2,440 additional permanent jobs in other sectors of the Bay area economy would result from the employment multiplier effect of the project.

On the basis of the January 1982 Office Housing Production Program (OHPP) formula, project office workers would generate a net requirement for 455 housing units in San Francisco, 370 units more than would be provided by the project's 85 units.

CUMULATIVE POLICE AND FIRE SERVICES (Pages 162-163)

The 2,240 project workers and 150 project residents would contribute to cumulative service demands in the Rincon Hill area for police and fire protection services. The additional annual cost (1980 dollars) to meet this cumulative demand would be about \$77,000 for a new police patrol unit, and about \$90,000 for a new fire protection engine and about \$750,000 for new Fire Department personnel. The project would generate a net

increase of about \$1.7 million to the General Fund, and would be expected to offset its share of added cumulative service costs.

GROWTH INDUCEMENT (Pages 163-164)

The project, along with adoption of the proposed Rincon Hill Plan, would further increase the attractiveness of the South of Market for office and residential development. The project's introduction of commercial and residential land uses would be expected to contribute to the escalation of land values and rents in the South of Market that have been documented by the Department of City Planning. The project would help establish Rincon Hill as a major new residential area in the City. As the first major development within the Rincon Hill Plan area, the project would stimulate and encourage other development, primarily residential, as called for in the Rincon Hill Plan.

C. MITIGATION MEASURES (Pages 165-180)

Major mitigation measures included in the proposed project are listed below; the complete list of measures included or not included is found in Section V., pp. 165-180.

- To provide improved pedestrian circulation and add new open space in the Rincon Hill Plan area, the project would include a publicly accessible mid-block (east-west) plaza.
- The height and parapet line of the base of the new construction would continue the upper cornice line of the landmark building. Visual relationship and transition between new and older buildings are encouraged in the Urban Design Element (Policies for Conservation, Policy 4, p. 35).
- In June 1984, the sponsor retained a historic archaeologist to perform an archival search and a site inspection to determine the potential for discovery of cultural or historical artifacts on the site. On the basis of the archival search, two structures listed on the 1853 U.S. Coast Survey could remain under the site, located approximately within 50 ft. of the Spear St. property line midway between Harrison and Folsom Sts. Prior to the start of construction, the sponsor would meet with the Department of City Planning to determine if subsurface construction activities are

proposed within this area, and if so, the sponsor has agreed to hire a qualified professional archaeologist to supervise a test program prior to construction to determine if these structures exist. This test program would include a maximum of four mechanical borings along the Spear St. frontage. Findings of the test would be submitted to the Environmental Review Officer in the form of a written report. (See pp. 167-168 for a complete description of how this mitigation would be implemented.)

- A member of the building management staff would be designated as a "transportation broker" to coordinate measures that are part of a transportation management program, such as: encouraging a flexible time system; encouraging transit use through on-site sale of transit passes; and encouraging employee carpool and vanpool systems.
- Construction truck traffic would be regulated to avoid peak-hour traffic congestion. Construction activity would be coordinated with other concurrent projects to minimize cumulative traffic effects of lane closures and street excavation.
- The project sponsor would install energy-saving devices, such as a variable-air volume air condition system and an air or water economizer cycle system.

Measures Not Included in the Project

- The sponsor could provide an enclosed off-street loading space in the landmark building to meet the full intent of Resolution No. 9286. This measure has not been included in the project because provision of the enclosed space in the landmark building would require partial demolition of this structure.
- The sponsor would provide 85 housing units on-site; under the January 1982 OHPP guidelines, the 85 housing units would be equivalent to 105-110 housing credits. To meet the City's OHPP policy, the sponsor could provide an additional 345-350 housing credits on-site. The sponsor has rejected this measure because excavation for additional residential parking would require dewatering and foundation work that could create risk of subsidence and damage to the landmark building.

- Alternatively, the sponsor could meet requirements of the existing OHPP guidelines by financing off-site housing development or contributing funds to a housing subsidy pool to be administered by a City agency. This measure is under consideration.

D. ALTERNATIVES TO THE PROPOSED PROJECT (Pages 184-206)

ALTERNATIVE A: RINCON HILL PLAN

This alternative would comply with the objectives and development controls contained in the Rincon Hill Plan, A Proposal for Citizen Review, June 1984, prepared by the Department of City Planning. The Rincon Hill Plan proposes that the Rincon Hill area be zoned for "mixed development -- offices, recreation, service retail, and housing" The project site would be located in the proposed Commercial/Industrial district of the Rincon Hill Plan area. In this district, zoning controls would be essentially the same as those in the existing M-1 district, with some lowering of residential density allowances and parking requirements, and the imposition of open space requirements. The Rincon Hill Plan proposes 84, 105 and 200 ft. height limits for the project site.

To meet bulk requirements of the M-1 district (and the Rincon Hill Plan), the base of the new construction in Alternative A would be 80 ft. tall (four ft. less than the project), and the stepped portions of the residential tower would be eliminated, resulting in fewer residential units. The mechanical penthouses would all be lowered to 16 ft. to meet the height requirements for mechanical penthouses.

Alternative A would provide 587,000 gross sq. ft. of offices; 40,000 gross sq. ft. of support retail; and 87,400 gross sq. ft. of residential space containing 74 units, 11 units fewer than the project. Approximately 32,000 sq. ft. of publicly accessible open space would be provided, 6,000 sq. ft. less than the project. Alternative A would rehabilitate and convert the existing landmark building to all offices, and provide about 1,200 sq. ft. of retail space on the ground-floor of the landmark building facing the mid-block plaza.

Under the requirements of the Rincon Hill Plan, Alternative A would need to provide about 485 parking spaces, 75 more spaces than the 410 that would be provided in the project.

In addition to the existing basement of the landmark building, three levels (one more than the project) of basement excavation under the new construction would be required for parking. This additional open-cut excavation and dewatering would require underpinning of the landmark building and would increase the risk of subsidence and damage to this structure.

Urban design aspects would differ from the project because of the 80-ft.-tall base of the new building, and elimination of the steps on the residential tower. Shadow effects of Alternative A as well as the likelihood of encountering cultural finds would be essentially the same as the project. Transportation, parking demand, circulation, and air quality impacts associated with this alternative would be slightly less than those of the proposed project due to the 11 fewer residential units provided in this alternative. Alternative A would provide about ten more jobs than the project. The OHPP housing requirement would remain the same as the project, 455 units. However, this alternative would provide 74 units, instead of the 85 units provided in the project.

Alternative A would strictly comply with the requirements of the Rincon Hill Plan and its proposed implementing ordinance. The proposed project would be substantially the same as Alternative A, except that it would not meet the bulk, mechanical space, retail space and parking requirements of the Rincon Hill Plan. The sponsor has rejected Alternative A, in favor of the project. The sponsor believes that it would not be possible to construct a project on the Hills site that would meet these requirements of the Rincon Hill Plan and still maintain the architectural integrity and structural soundness of the landmark building.

ALTERNATIVE B: RESIDENTIAL

The site would be developed into residential uses (70%) except for the landmark building which would be developed into office space. Alternative B would meet the height limits and parking requirements under the Rincon Hill Plan. Alternative B would rehabilitate the landmark building and convert it into 217,000 gross sq. ft. of office space and 33,000 gross sq. ft. of parking (about 65 spaces) in the existing basement level. The new residential construction would contain 40,000 gross sq. ft. of ground-floor retail space and 530,000 gross sq. ft. of residential space, containing 500 units. Total development, exclusive of basement parking would be 787,000 gross sq. ft., 60,000 sq. ft. more than

provided in the project. The new residential construction would look similar to the proposed project, and would include a publicly accessible mid-block plaza between the landmark building and the new construction. Alternative B would be required to provide a minimum of about 220 parking spaces in one level underneath the new construction and in the one existing basement level of the landmark building.

Shadow effects would be similar to the project with longer shadows from the easternmost portion of the base. The likelihood of encountering cultural findings with this alternative would be the same as for the project. Transportation, circulation and air quality impacts would be about 20% less than the project. Parking demand from this alternative would be for 750 spaces, 130 more than the project's parking demand. Additional parking required to satisfy this demand would increase open-cut excavation and dewatering, thereby increasing the risk of subsidence and damage to the landmark building. A residential alternative would provide about 65% fewer jobs than the project. The employee-related housing requirement pursuant to the January 1982 OHPP guidelines would be 126 units, which would be met by the 500 units of housing provided on-site.

The sponsor has rejected this alternative primarily because of its potential structural damage to the landmark building, and the difficulty of marketing an all-residential development as the first major project proposed in the Rincon Hill Plan area.

ALTERNATIVE B.1: RESIDENTIAL/RETAIL VARIANT

The design of this variant would be the same as the main Residential Alternative. It would differ from Alternative B only in the provision of 80,000 sq. ft. of retail space, instead of 40,000 sq. ft. and in the reduction of housing units from 500 to 460 units. The intent of this variant is to provide not only service retail for proposed on-site workers and residents, but to provide some city-wide retail services, and a wider variety of retail services to support the greater Rincon Hill neighborhood and nearby downtown and waterfront commercial office uses.

Land-use effects of this variant would be similar to the main Residential Alternative, except that more city-oriented retail uses would be provided on-site in addition to neighborhood-serving retail. This variant would create a parking demand for 740 spaces, 120 more than the project.

In addition to the reasons stated for Alternative B, this alternative has been rejected primarily because the sponsor believes that daytime patronage from the landmark building and surrounding area would not be sufficient to support the additional amount of retail space provided in this alternative.

ALTERNATIVE C: ALL OFFICE

Alternative C, an all-office alternative, would rehabilitate the landmark building and tower (217,000 gross sq. ft.) for office use; and construct 40,000 gross sq. ft. of ground-floor retail space and 493,000 gross sq. ft. of office space on the remainder of the site, for total development of 750,000 gross sq. ft. Alternative C would include an 80-ft. base with a stepped configuration reaching about 105 ft. on the Spear St. frontage. The mid-block plaza in Alternative C would contain about 7,750 sq. ft. less than the project. To comply with the existing Code, a total of about 1,100 parking spaces would be required. To accommodate the number of spaces, six parking levels would need to be excavated. The effects of this increased excavation would increase risk of subsidence and could damage the landmark building.

An all-office alternative would not provide the mix of uses called for in the project site by the Northeastern Waterfront Plan and in the proposed Rincon Hill Plan. Shadows would still occur on the shoreline promenade with this alternative during late afternoon (3:00 to 4:30 p.m.) in December; however shadows would be substantially shorter than those cast by the project. Alternative C would have the same effect on cultural resources as the project. The project impacts in the areas of transportation, parking demand, circulation, energy use, and air quality would be higher (up to 20%) than the project. The net direct employment for this alternative would be about 25% more than the project, including 2,310 office workers. Under the January 1982 OHPP guidelines office worker housing requirement would be 565 units, 110 units more than would be required by the project.

This alternative has been rejected because the sponsor believes that the four additional levels of basement parking required for this Alternative would not be feasible due to the water table and soils conditions at the site.

ALTERNATIVE D: NO PROJECT

In Alternative D, the landmark building would be retained, and would continue to be occupied by Hills' headquarters offices. The remaining six buildings on the site either

would remain vacant or be used for storage space by individual tenants. Conditions would be the same as those described in the setting section except that there could be a reduction in traffic, parking and transit demand in the project vicinity if the site were to remain vacant. The sponsor rejected Alternative D because it would not structurally rehabilitate the landmark building, and would not permit buildout potential of the site under the existing City Planning Code or the proposed Rincon Hill Plan.

II. PROJECT DESCRIPTION

A. PROJECT BACKGROUND AND SPONSOR'S OBJECTIVES

Hills Bros. Coffee, Inc. (Hills) has been headquartered and engaged in the business of processing, packaging and selling coffee in San Francisco since 1887; the firm has been at its current headquarters location since about the turn of the century. Existing coffee manufacturing, production, and packaging uses at the site are currently being consolidated with operations at the existing Hills coffee plant at Mariposa and Arkansas Sts. in San Francisco. This consolidation will leave most of the buildings on the site vacant or under-used. To maximize use of the site, Hills proposes to rehabilitate and convert into office use the existing Two Harrison St. building, a designated City landmark, demolish the remaining buildings and parking lot, and develop office, residential, retail uses, underground parking and open space on the remainder of the Hills site.

The sponsor's objectives are to retain Hills' world headquarters in San Francisco at its current location; preserve the architecture of the noted landmark building and develop the building as quality offices; provide modernized, more energy efficient office space for Hills' administrative offices; and develop quality new construction so as to maximize the economic value of the site. The project has been designed to be consistent with the policies and objectives of the proposed Rincon Hill Plan sponsored by the Department of City Planning./1/

The sponsor's development consultant is CEDEVCO. Project architects are Whisler-Patri, San Francisco.

B. PROJECT LOCATION

The proposed Hills Plaza project would occupy Lot 1 on Assessor's Block 3744, the entire City block bounded by Harrison, Steuart, Folsom, and Spear Sts. (see Figure 1, p. 18). The project site contains about 151,250 gross sq. ft. of land area. The length of the site is

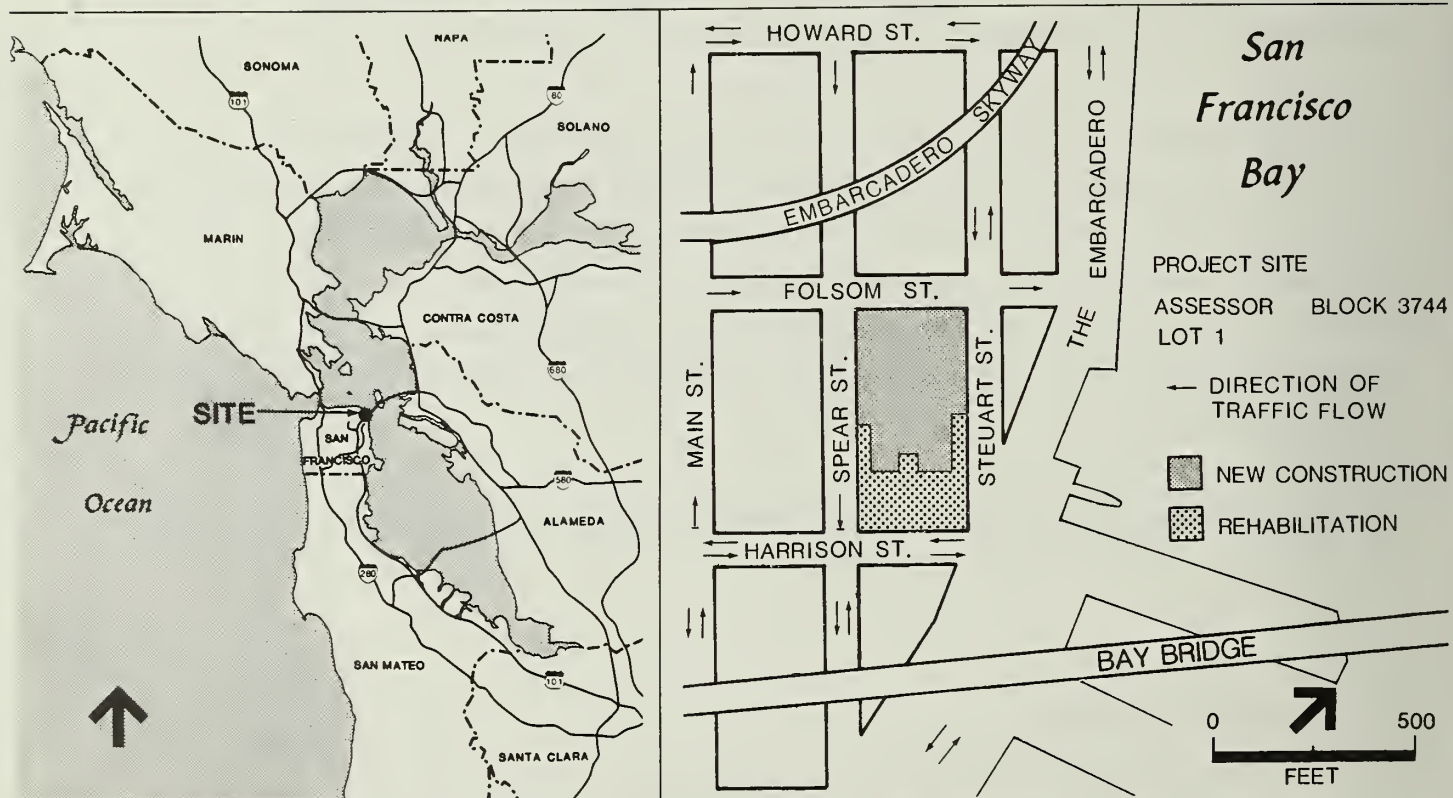
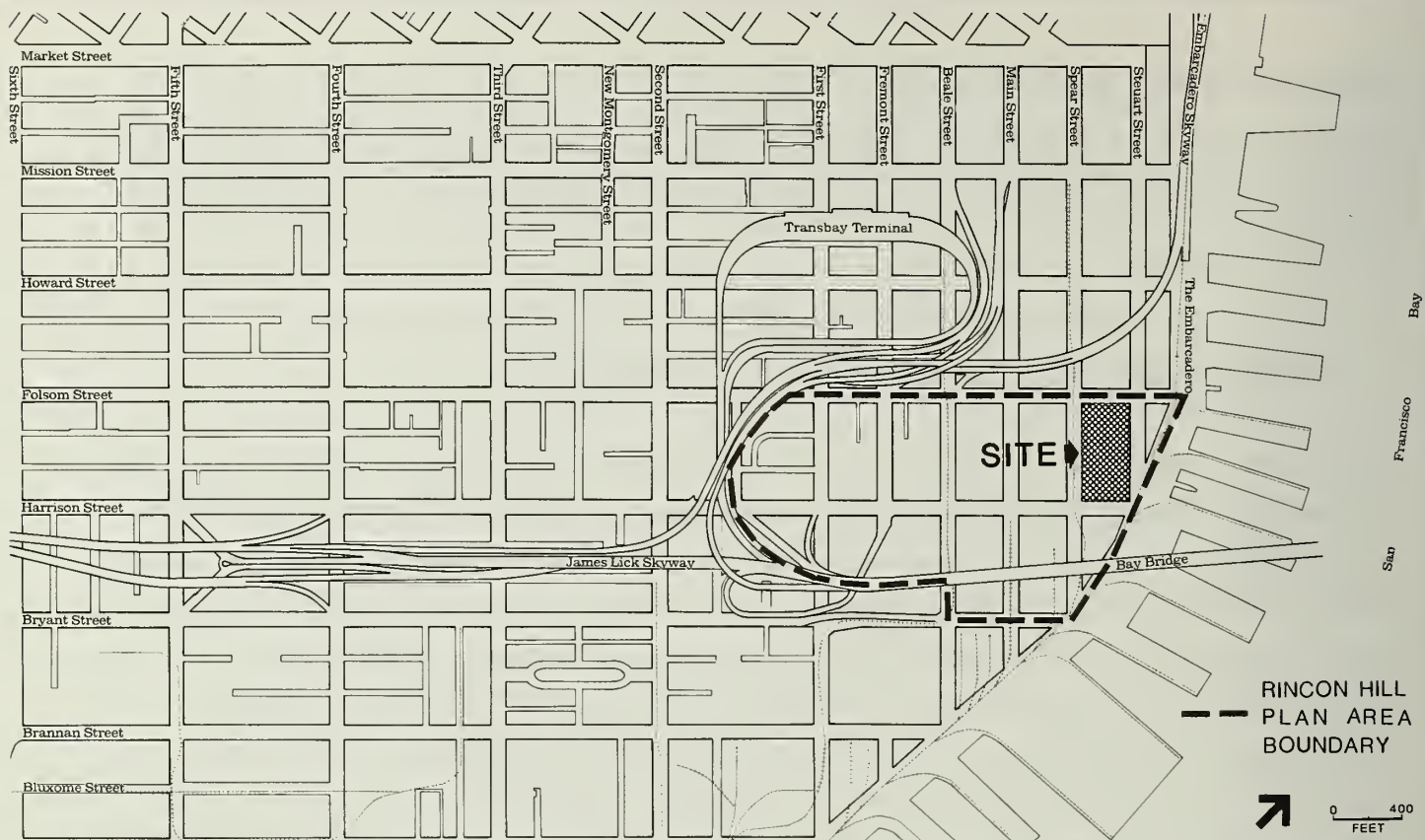


FIGURE 1
PROJECT LOCATION

about 550 ft. fronting on Spear and Steuart Sts., and the width is about 275 ft. fronting on Folsom and Harrison Sts.

The site is at the foot of Rincon Hill, and within the eastern edge of the proposed Rincon Hill Plan area. The project site is immediately adjacent to the Folsom St. boundary of the existing C-3-S (Downtown Support) district. That portion of the C-3-S district is proposed for C-3-O (SD) controls in the Downtown Plan.

The site is in an M-1 (Light Industrial) Use district, and a 105-F Height and Bulk district. The Basic Allowable Floor Area Ratio (FAR) is 5:1; that is, buildings may have a basic floor area that is five times the area of the site. The maximum height is 105 ft., and maximum length and diagonal dimensions above 80 ft. are 110 ft. and 140 ft., respectively.

C. EXISTING ON-SITE USES

The site currently contains seven buildings and 55 surface-level parking spaces, all of which are owned by Hills. The landmark building and tower located at Two Harrison St. would be retained as part of the project. That building contains about 62,400 total gross sq. ft. of office space used for headquarters offices, 154,600 gross sq. ft. of coffee manufacturing space, and 33,000 sq. ft. of basement storage. The remaining six buildings and surface parking spaces would be demolished for the new construction. These six buildings contain about 86,800 total gross sq. ft. of coffee manufacturing space. Total occupied floor area on-site is about 336,800 gross sq. ft.

After project completion, the project site would continue to be used for the world headquarters offices of Hills Bros. Coffee, Inc. Existing coffee operations at the site are now being consolidated with operations at the existing Hills coffee plant at Mariposa and Arkansas Sts. in San Francisco; this consolidation is expected to be completed by the end of 1985.

D. PROJECT CHARACTERISTICS

The project would rehabilitate and convert the landmark building and tower into all office use, totaling about 217,000 gross sq. ft. of office space with 33,000 gross sq. ft. of parking

TABLE 1: FLOOR AREA BY PROPOSED USE (Gross Sq. Ft.)

<u>Use</u>	<u>Rehabilitation</u>	<u>New Construction</u>	<u>Total</u>
Office	217,000	370,000	587,000
Support Retail	--	40,000	40,000
Residential (85 units)	--	100,000	100,000
Subtotal/a/	217,000	510,000	727,000
Parking	33,000	167,000	200,000
TOTAL/b/	250,000	677,000	927,000

/a/ Floor area applicable to FAR (Floor Area Ratio); see discussion on p. 33.

/b/ Totals do not include approximately 23,000 sq. ft. of basement mechanical and 21,000 sq. ft. of penthouse mechanical space.

SOURCE: Whisler-Patri Architects

(about 65 spaces) in the existing basement. New construction would include about 370,000 sq. ft. of office space; 40,000 sq. ft. of ground-level, support-retail space; 100,000 sq. ft. of residential space (85 units); and 167,000 sq. ft. of parking. Table 1, above, summarizes proposed project uses.

After subtracting the total floor area of existing buildings to be demolished (86,800 gross sq. ft.) and total existing floor area in the landmark building to be retained (250,000 gross sq. ft.), total net new floor area on site would be 590,200 gross sq. ft. including square footage proposed for parking. Net changes in floor area by use would be an increase of about 524,600 gross sq. ft. of offices (154,600 sq. ft. converted and 370,000 sq. ft. new construction, and excluding 62,400 sq. ft. which would be retained); a decrease of about 274,400 gross sq. ft. of coffee manufacturing space, of which 86,800 sq. ft. would be demolished, 154,600 sq. ft. converted into office and 33,000 sq. ft. converted into basement parking; and an addition of about 100,000 gross sq. ft. of residential space, 40,000 gross sq. ft. of retail space, 167,000 gross sq. ft. of basement parking, 38,000 gross sq. ft. of public open space, and 17,000 gross sq. ft. of common residential open space. The new and converted space devoted to parking (about 200,000 gross sq. ft.) would provide a total of about 410 parking spaces, about 355 more than the 55 spaces presently in the site's surface parking area.

NEW CONSTRUCTION

The new construction would consist of two levels of underground parking, and three building elements: a distinct base containing an interior plaza, ground-level retail, and five floors of offices; a stepped element mid-block on Spear St. rising two stories above the base containing offices; and a tower rising eleven stories above the base at the corner of Spear and Folsom Sts. containing residences (see Figure 2, p. 22).

Underground parking, as shown in Figures 3 and 4, pp. 23-24, would be provided in one existing basement level under the landmark building, and in two new basement levels under the new construction. The garage would provide 410 parking stalls, including 17 handicapped stalls; of the 410 spaces, 100 would be for short-term project visitors, 225 (long-term spaces) for office workers, and 85 for project residents and their visitors. Automobiles would enter the garage from Folsom St. and exit on Spear St. Residential and long-term office parking would be provided on the lower basement level under the new construction. The upper level of parking would extend the entire length of the site, and would connect the existing basement under the landmark building with the basement of the new construction. Long-term office and short-term project visitor parking would be provided on the upper basement level.

Enclosed, off-street loading would be provided on the ground level by four truck-loading and two van spaces, accessed from Spear St. near Folsom St. (see Figure 5, p. 25). The sponsor would request City approval for two curbside loading spaces on Spear St. or Harrison St. to serve the landmark building. See p. 36 for approval requirements.

An 84-ft.-tall, six-story base would be the main element of the new construction. It would contain 40,000 gross sq. ft. of ground-floor, support retail with five floors of office space above. Approximately 370,000 sq. ft. of office space would be contained in the base with a typical floor size of about 68,000 gross (58,000 net) sq. ft. Figure 5 on p. 25 shows the ground-floor plan of the project. An interior arcade would provide access to the retail space and serve as a north-south pedestrian spine for the project. At the center of the interior arcade would be a private courtyard open to the sky, with landscaped terraces on the fifth- and sixth-story levels (see Figures 6-7, pp. 26-27). A one-story, 19-ft.-high mechanical penthouse would be set back about 50 ft. from Steuart St. atop the roof of the

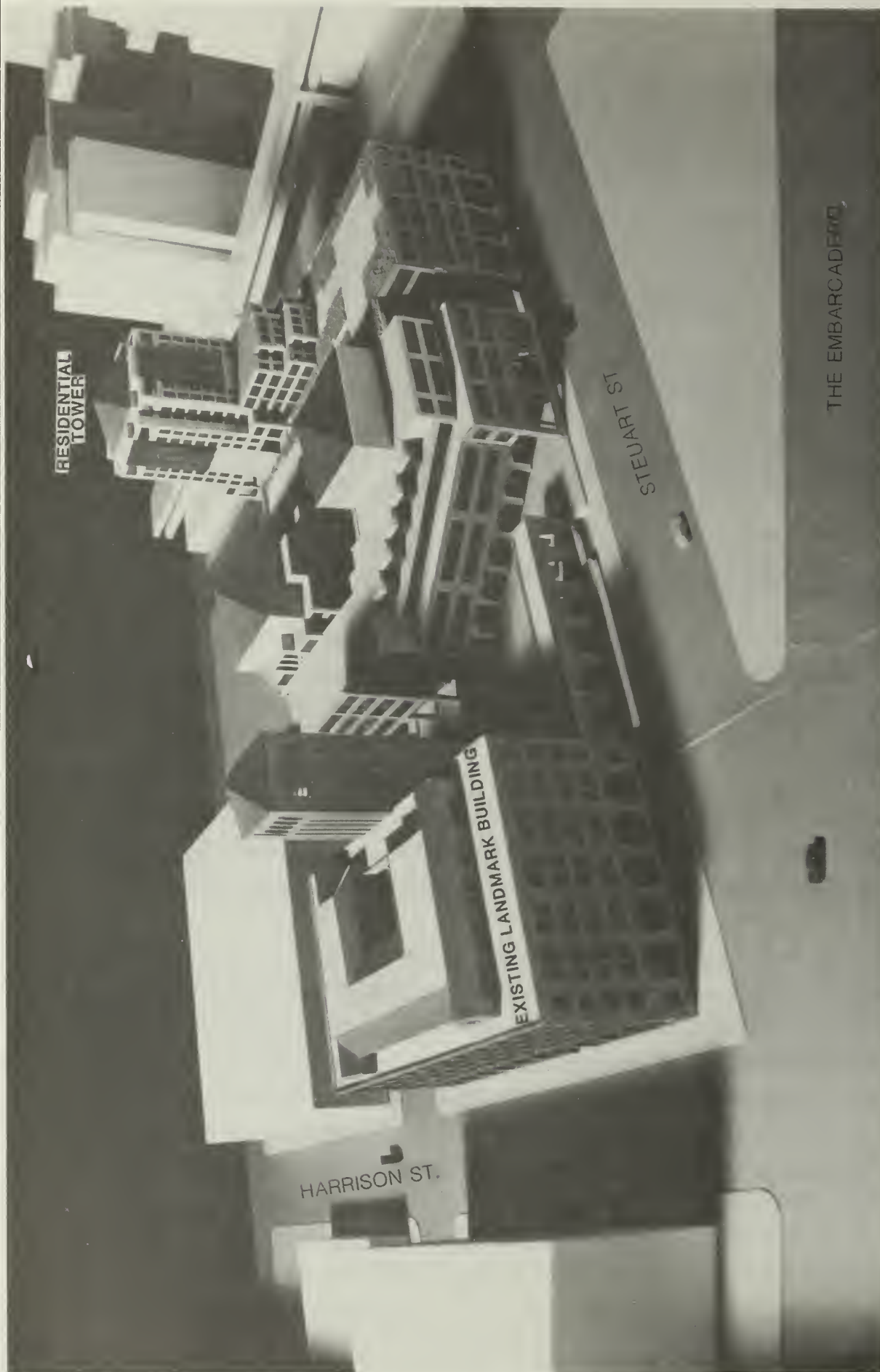
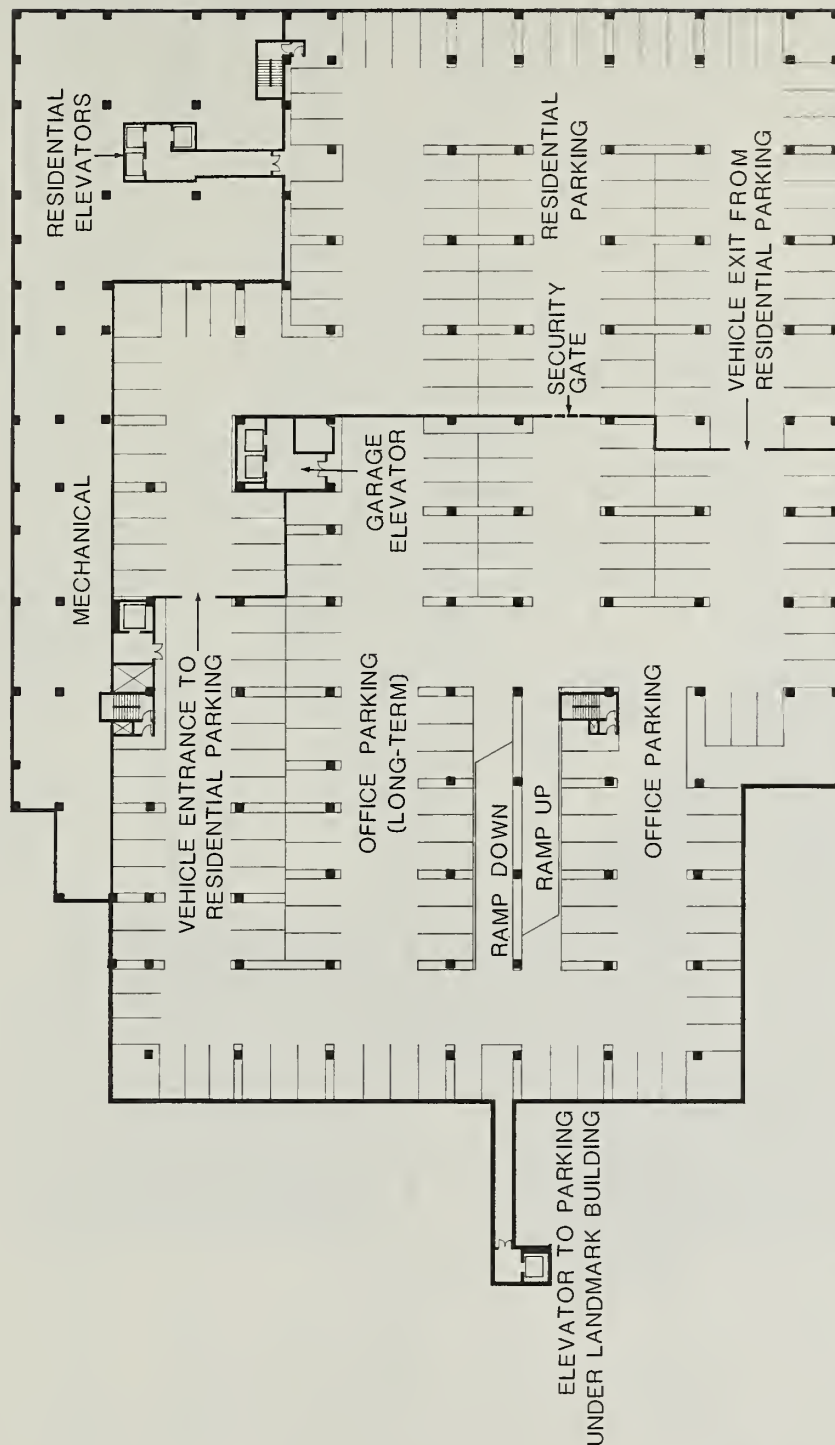


FIGURE 2
PHOTOGRAPH OF PROJECT MODEL

SOURCE: Whisler-Patri Architects

SPEAR STREET



FOLSOM STREET

UNDERNEATH NEW CONSTRUCTION

STEUART STREET



FIGURE 3
LOWER-LEVEL BASEMENT PARKING

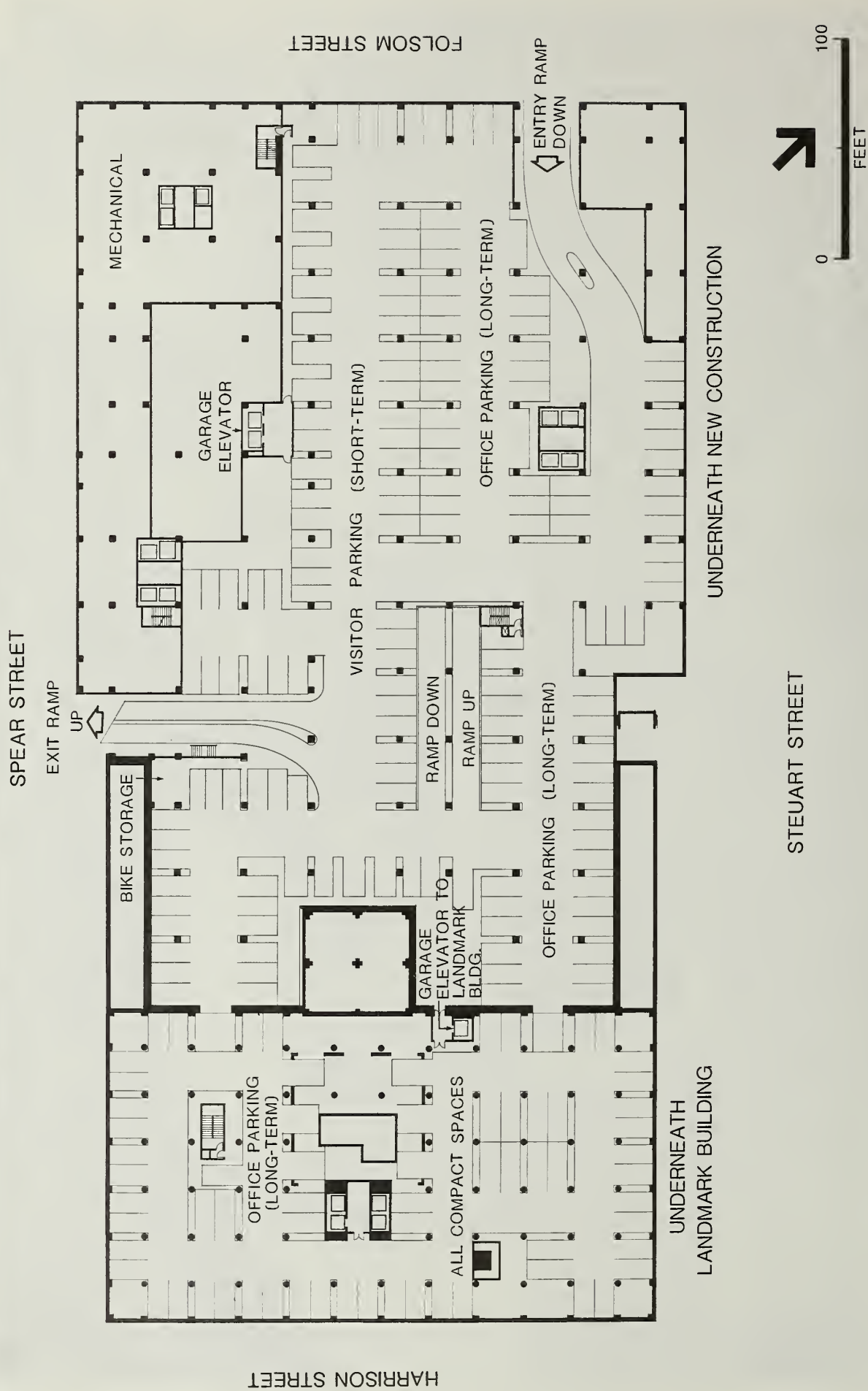


FIGURE 4
UPPER-LEVEL BASEMENT PARKING

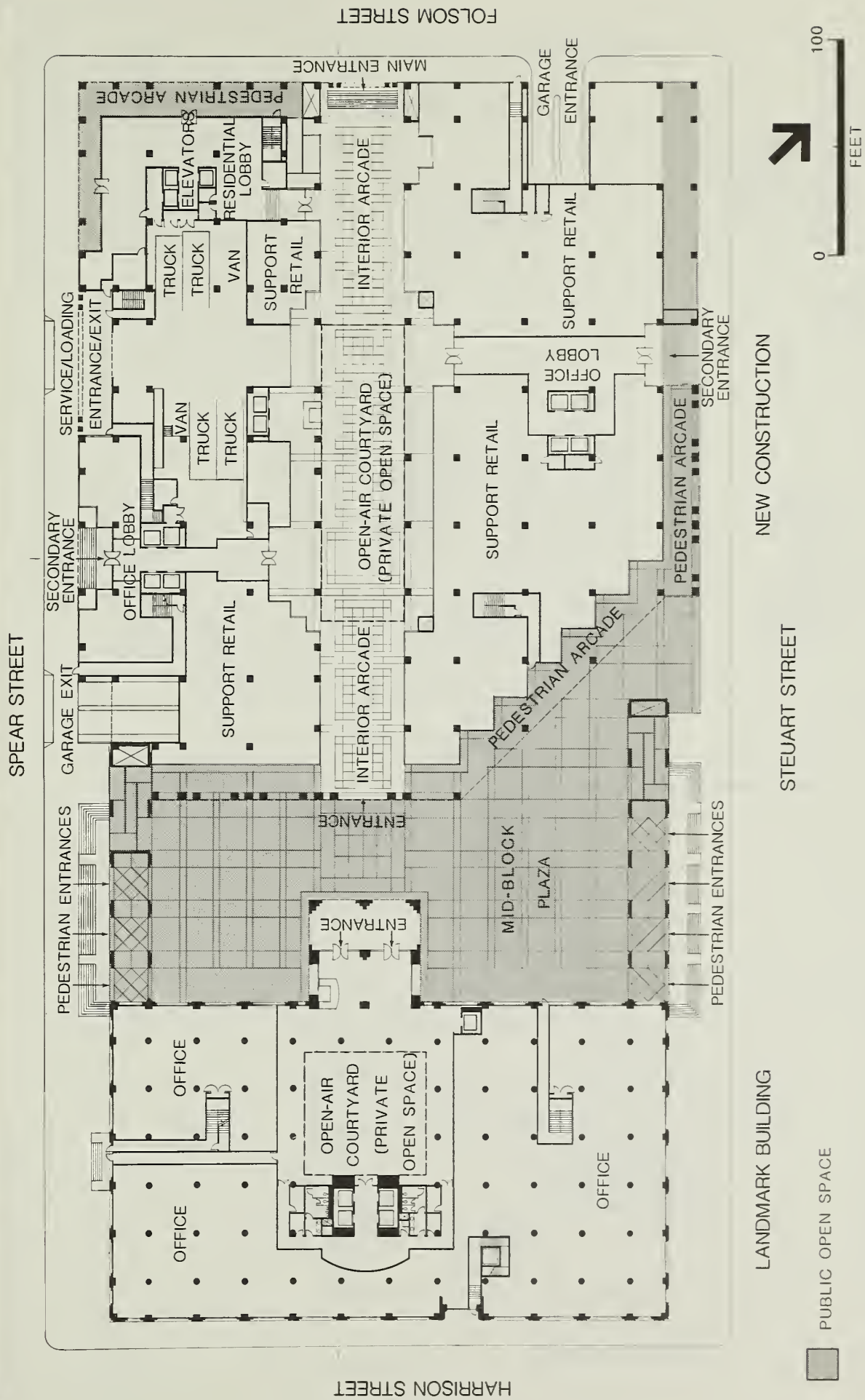


FIGURE 5
GROUND-FLOOR PLAN

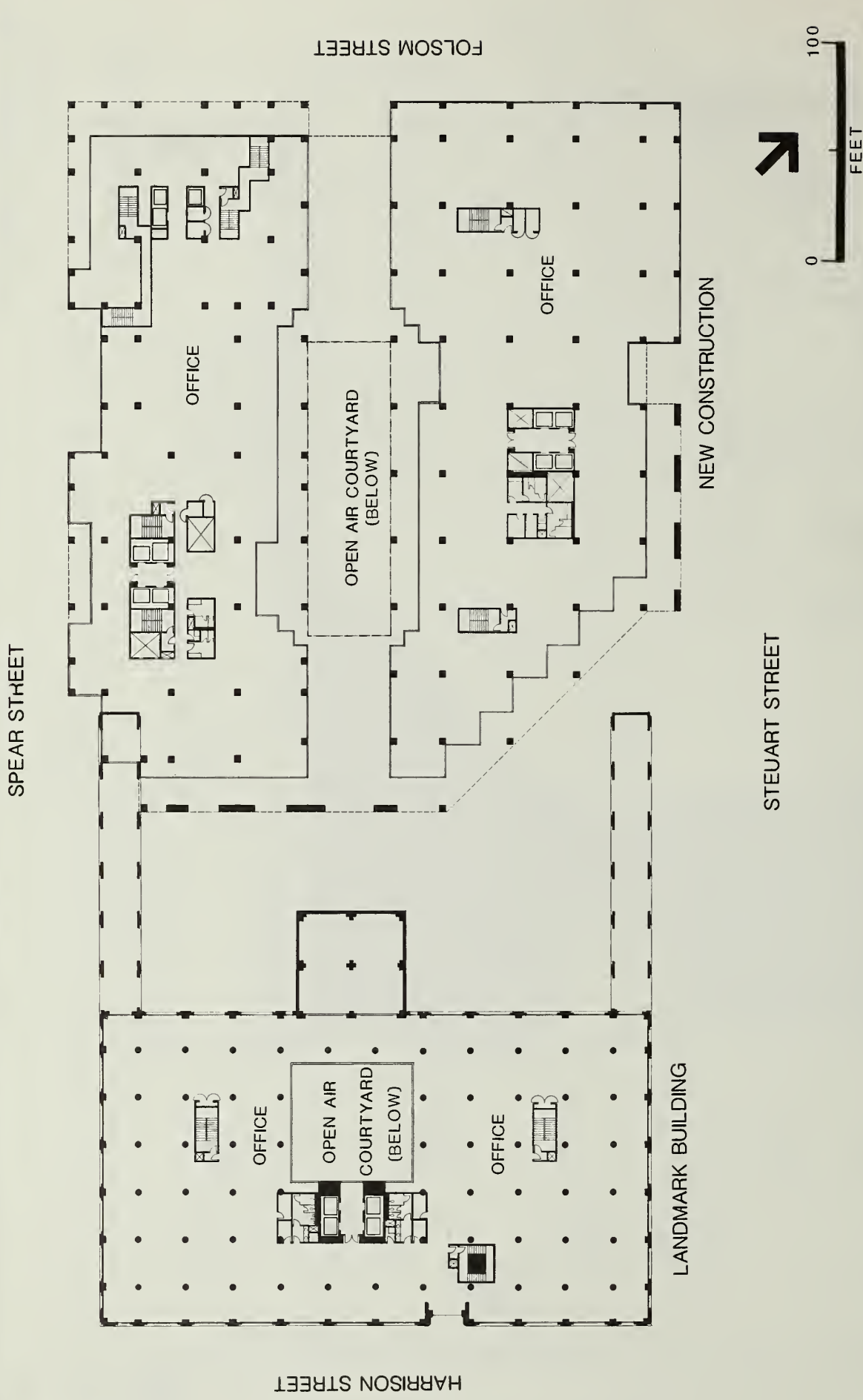


FIGURE 6
SECOND-FLOOR PLAN

SOURCE: Whisler-Patri, Architects

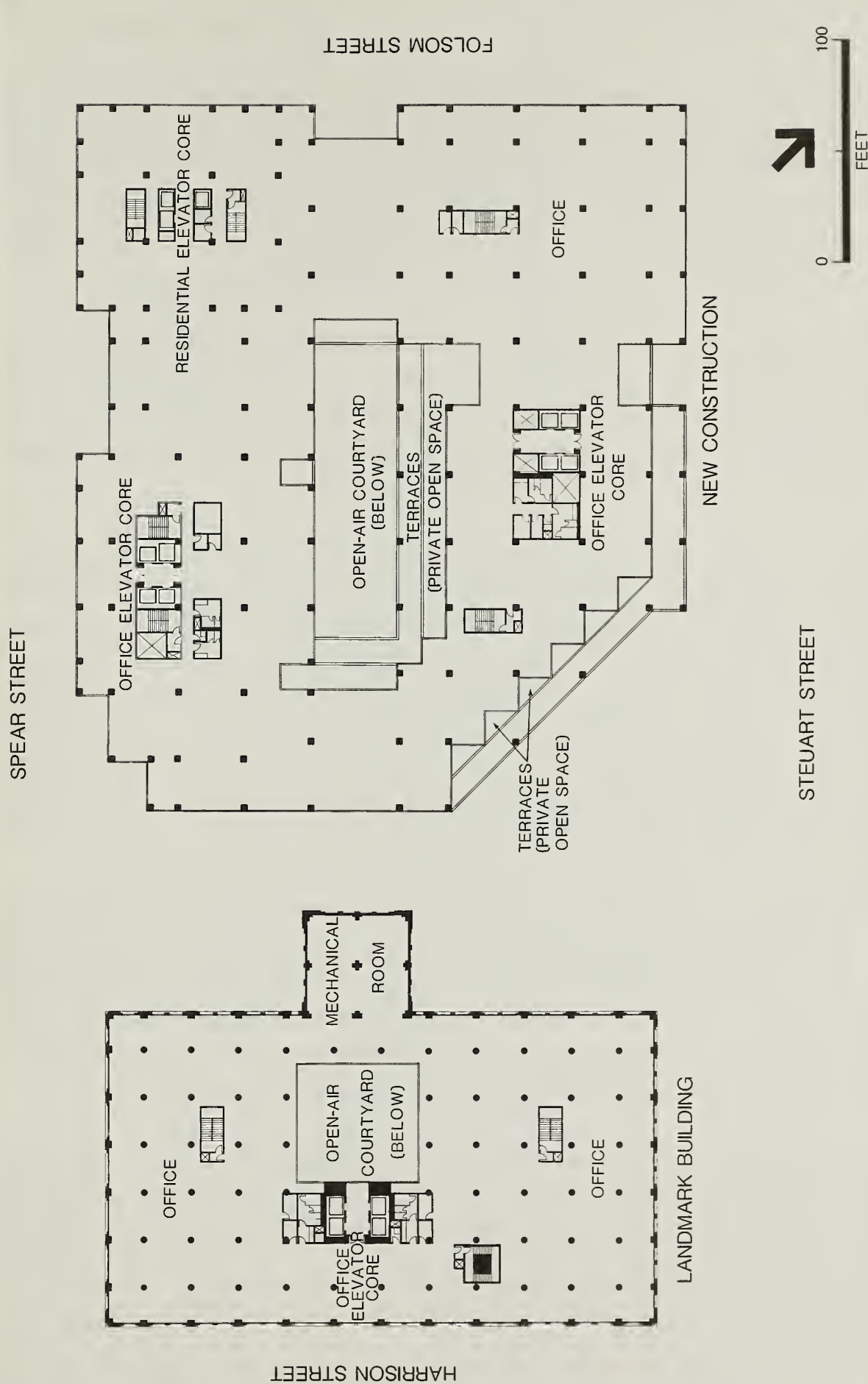


FIGURE 7
SIXTH-FLOOR PLAN

SOURCE: Whisler-Patri Architects

II. Project Description

base. The facade of the base would be detailed with recessed entrances, and pedestrian arcades framed by double-story arched and rectangular bays. Private terraces and balconies for use by office workers would be provided on the fifth- and sixth-floor levels, oriented toward the landmark building and Bay. Entrances to the ground-level retail and office space would be provided from Spear, Folsom and Steuart Sts., and from a mid-block plaza (see discussion on p. 32) between the landmark building and new construction.

Mid-block on Spear St., the building would rise to seven stories with two mechanical penthouse levels (49 ft. in height) above the 7th floor, for a total height of about 155 ft. Although appearing as a separate building, the first six stories of this portion of the building would be contiguous to the base. The seventh floor would be about 11,000 gross (9,500 net) sq. ft.

At the corner of Spear and Folsom Sts., there would be a 17-story residential tower in which floors seven through 17 would be separate from the six-story base. The residential tower would rise 116 ft. above the base to a height of 200 ft., with a 26-ft.-tall mechanical penthouse above, for a total height of 226 ft. (see Figures 8-10, pp. 29-31). The residential floors would be distinguished from the office floors of the base by architectural treatment at the seventh floor. The residential tower would be set back between the eighth and eleventh floor levels, creating a series of steps (see Figure 2, p. 22). Common open space (22,000 gross sq. ft.) for the residential units would be provided on the roof of the base, just east of the residential tower.

The 100,000-sq.-ft. residential tower would contain 85 units. About 75% (60-65 units) would be one-bedroom, ranging in size from 750 to 800 sq. ft., and the remaining (20-25 units) would be two-bedroom, ranging in size from 850 to 1,000 sq. ft. A separate lobby and elevators would be provided for the residential units with pedestrian access from Folsom and Spear Sts. Residential elevators would bypass the five office floors in the base and take residents and visitors directly to the residential floors.

The vertical proportions and pitched roof of the mid-block Spear St. tower and residential tower would reflect the shape of the tower portion of the existing landmark building. The design of the new construction would extend the architectural detail of the landmark

SPEAR STREET

HARRISON STREET

FOLSOM STREET

STEUART STREET

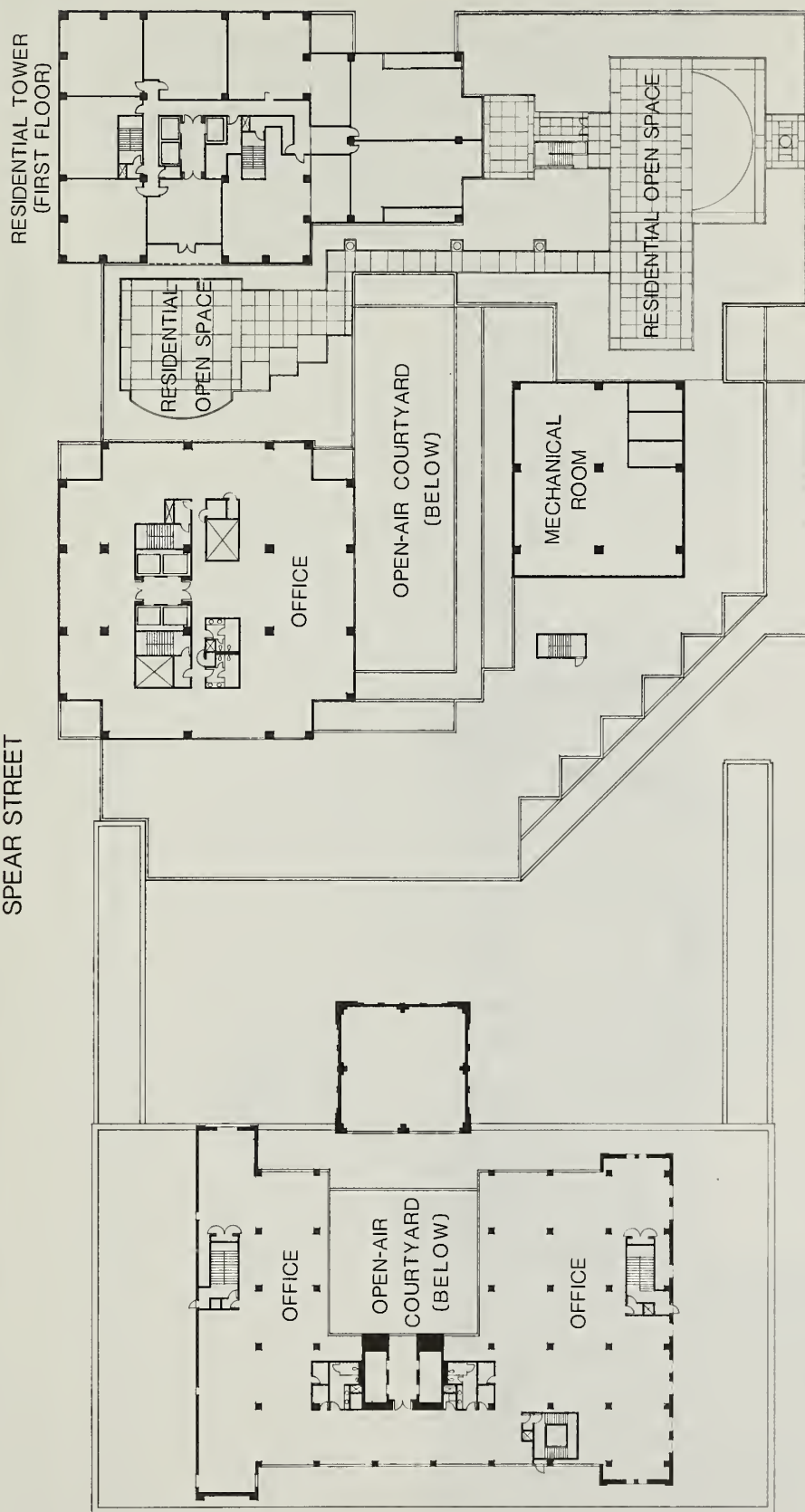


FIGURE 8
SEVENTH FLOOR AND
TYPICAL RESIDENTIAL FLOOR PLAN

SOURCE: Whisler-Patri Architects

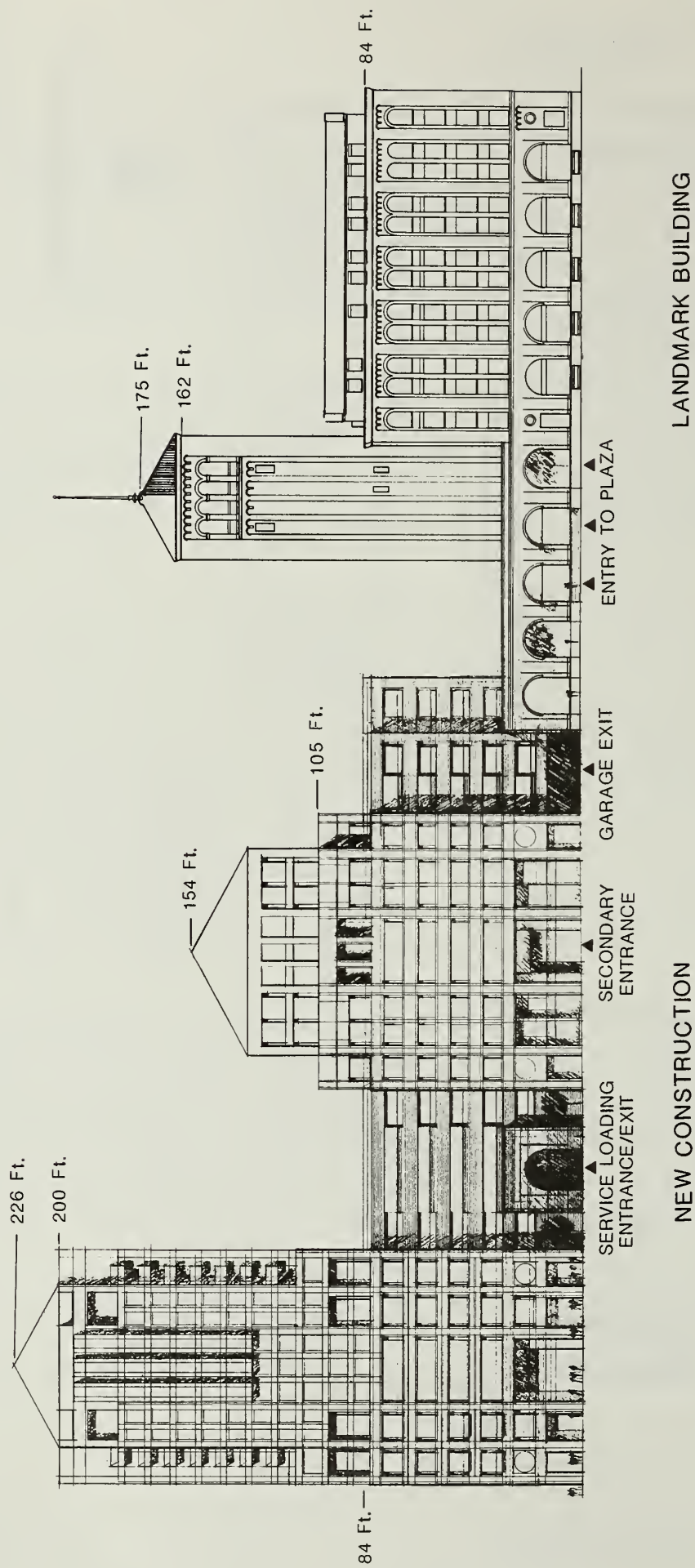
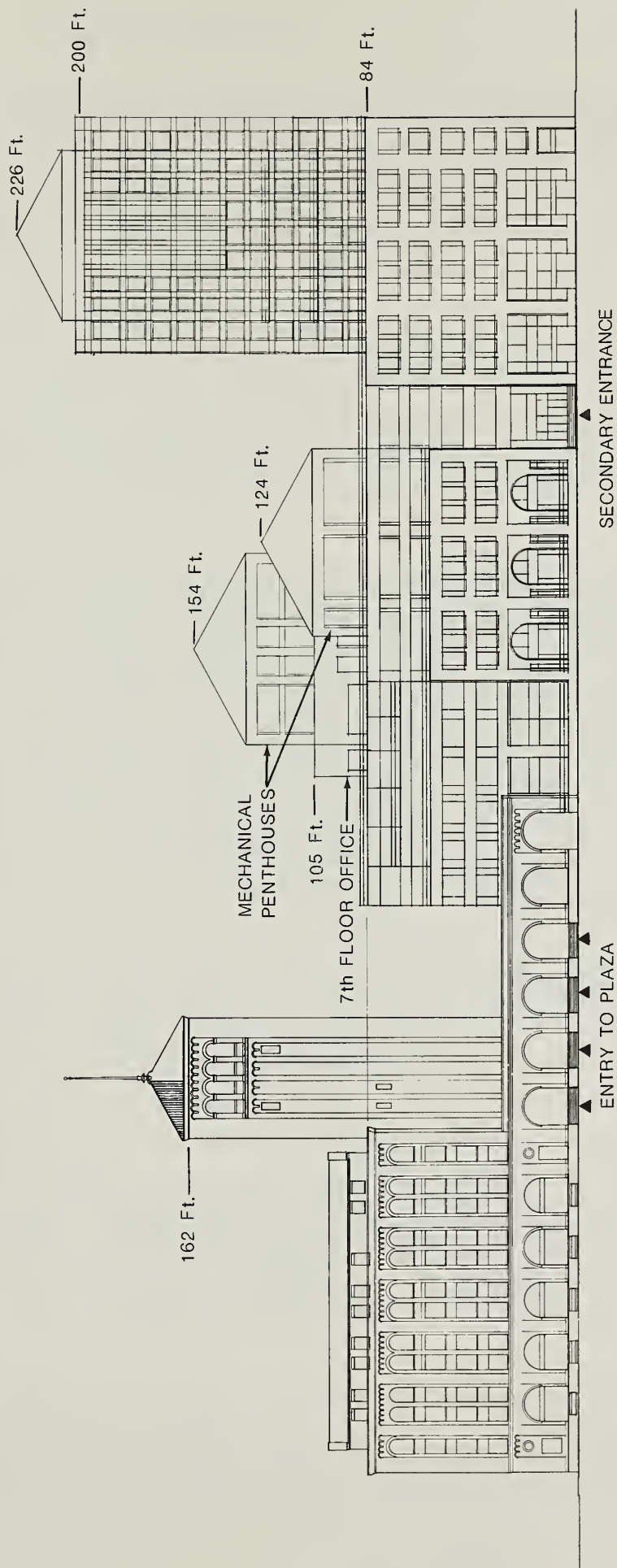


FIGURE 9
SPEAR STREET ELEVATION



LANDMARK BUILDING

NEW CONSTRUCTION



FIGURE 10
STUART STREET ELEVATION

SOURCE: Whisler-Patri Architects

building by use of arched, pedestrian-level bays and punched windows on upper floors (see Figures 9-10, pp. 30-31). The 84-ft. height of the base would be approximately the same height as the landmark building. The eastern corner of the base would be set back above about 60 ft. in height along the mid-block plaza and Steuart St. facade to create a pedestrian-scale street wall. Exterior finishes under consideration for the new construction are a combination of brick, brick tile, masonry, pre-cast concrete, or stone. Windows would be of bronze or light grey glazing; no mirrored glass would be used.

A total of 38,000 gross sq. ft. of publicly accessible open space would be provided in the project; 31,000 gross sq. ft. contained in a mid-block plaza, and 7,000 gross sq. ft. in pedestrian arcades.

The mid-block (east-west) plaza would be located between the new construction and the landmark building. This plaza could be entered through the existing freestanding arched bays of the landmark building on Spear and Steuart Sts., or through additional openings created as part of the new construction (see Figure 5, p. 25). The Y-shaped plaza would fan out to the Steuart St. frontage of the project block toward the waterfront. Pedestrian arcades would be on the Steuart St. frontage of the ground-floor retail and on the Folsom and Spear St. frontages of the residential tower. The plaza and Steuart St. arcade would direct pedestrian flows to the corner of Steuart and Folsom Sts., providing a pedestrian link to The Embarcadero and the waterfront.

The mid-block plaza would be accessible to the public 24 hours a day. The interior retail plaza and open-air courtyard would not be accessible to the public at night or outside of normal business hours. A full security system would be provided in the project, including security stations, staffed with a 24-hour security force, closed-circuit television to monitor the entire site, and employee access controls. After normal business hours, elevators would be operated so that all after-hour workers pass by a security station instead of having direct access to office floors from the parking garages. Residential parking, for residents and their visitors, would be segregated from office and project visitor parking, and would be accessible only through security-controlled doors.

REHABILITATION

A major aspect of this project is the rehabilitation of the landmark building and its conversion into all office space. The 84-ft.-tall building is six stories, and is flanked to

the north by a pitched-roof tower that is 162-ft.-tall at the parapet. The landmark building would be functionally integrated into the project by the newly constructed upper-level basement parking which would connect to the existing basement of the landmark building, and by the mid-block plaza which would provide access to the new public entrance to the landmark building.

The interior of the landmark structure would be completely renovated, including structural bracing for seismic reinforcement. Up to 12,000 gross sq. ft. of interior floor area would be removed to create a first-floor private courtyard open to the sky, requiring modifications to the seventh-floor roof level.^{/2/} The typical office floor in the landmark building would be approximately 34,000 gross (29,000 net) sq. ft.

Proposed exterior alterations entail removal of fire escapes and metal canopies along the Spear St. facade. Metal coffee roasters, which protrude through the roof, would be removed and replaced with a brick structure similar to the architecture of the existing landmark building. A metal addition enclosing coffee roasters would be removed from the rear facade west of the tower. The end (northernmost) bay along Spear St. would be removed to provide egress from basement parking. Metal roll-up doors at the ground level would be replaced with windows similar to existing upper-level windows of the landmark building. Arched openings would be created at the base of the tower to provide an entrance to the landmark building from the proposed mid-block plaza. The existing main entrance on Harrison St. would no longer be used for public access to the building. Canvas awnings and canopies may be added to the existing street-level arched-window bays of the landmark building. The "Hills Bros. Coffee" sign atop the landmark building is part of the landmark designation and would be retained.

ZONING

The 5:1 FAR applicable to the 151,250 sq. ft. site would permit, with the use of corner and through-lot premiums, a maximum allowable floor area of 849,375 gross sq. ft., resulting in an allowable FAR of about 5.6:1. The proposed development of 727,000 gross sq. ft. would have an FAR of 4.3:1 with premiums or 4.8:1 without premiums.^{/3/}

The project would require exceptions to the maximum bulk (length and diagonal) limits. A height reclassification would be required to construct the 200-ft.-tall residential tower

in the 105-F district and to accommodate the heights of the three mechanical penthouses, all of which exceed the 16-ft. height limit (see Approval Requirements discussion, p. 36 and Zoning discussion, pp. 72-74).

Project characteristics are summarized in Table 2, p. 35.

E. PROJECT SCHEDULE, PHASING AND COST

SCHEDULE AND PHASING/4/

The sponsor expects project review and detailed design to be completed by early 1985. New construction would occur in Phase 1, and would require about 24 months to complete. Rehabilitation of the existing landmark building would begin in Phase 2, taking about 12 months to complete. Initial occupancy of the new construction is expected by early 1987, and of the landmark building by early 1988. Total project construction and rehabilitation would take about 36 months. The duration of each activity would be as follows:

Phase 1: New Construction

Demolition and Site Clearance	2 months
Excavation	2 months
Pile Driving	1 month
Building Construction and Finishing	19 months
Initial Occupancy of New Construction	24 months after construction starts

Phase 2: Landmark Building

Rehabilitation/Conversion	12 months
Initial Occupancy of Landmark Building	12 months after rehabilitation starts

Existing headquarters office employees would remain in the landmark building during the new construction. Upon completion of the new construction, these office employees would be relocated to the new construction during rehabilitation of the landmark building. After project completion, existing Hills headquarters office employees would occupy about 75,000 gross sq. ft. of floor area in either the new construction or landmark building.

TABLE 2: PROJECT CHARACTERISTICS

HEIGHT AND BULK MEASUREMENTS (Ft.)

<u>Project Element</u>	<u>Stories</u>	<u>Height</u>		<u>Maximum Length (above 80 ft.)</u>		<u>Maximum Diagonal (above 80 ft.)</u>	
		<u>Proposed</u>	<u>Permitted</u>	<u>Proposed</u>	<u>Permitted</u>	<u>Proposed</u>	<u>Permitted</u>
Landmark Building/Tower	7+ tower	84/162	84/162/a/	248	248/a/	284	284/a/
Office/Retail Base	6	84	105	320	110/b/	400	140/b/
Mid-Block Spear St. Tower Element/c/	7	105	105	110	110	135	140
Residential Tower/d/	17	200	105	155	110	170	140
Mechanical Penthouses/e/	--	19/26/49	16/e/	--	--	--	--

EXISTING AND PROPOSED USES (Gross Sq. Ft.)/f/

	<u>EXISTING</u>		<u>PROPOSED</u>		
<u>Use</u>	<u>To Be Demolished</u>	<u>Rehabilitation Retained/Converted</u>	<u>New Construction</u>	<u>Net Change On-Site</u>	
Support Retail	0	0 / 0	40,000	40,000	
Office	0	62,400 / 154,600	370,000	524,600	
Residential	0	0 / 0	100,000	100,000	
Coffee Manufacturing/g/	<u>(86,800)</u>	<u>0 / 0</u>	<u>0</u>	<u>(86,800)</u>	
TOTAL	(86,800)	62,400 154,600	510,000	--/g/	

FLOOR AREA

	<u>Floor Area Gross Sq. Ft.</u>	<u>FAR/h/</u>
Site Area	151,250	--
Basic Permitted Floor Area	756,250	5:1
Basic Permitted Floor Area with Premiums		
Corner Premium	15,625	--
Through-lot Premium	3,000	--
Total Floor Area Ratio Basis (includes site area)	169,875	
Total Permitted Floor Area	849,375	5.6:1
Project Area Applicable to FAR Office/Retail (without Housing)	727,000 627,000	4.3:1 3.9:1
Basic Permitted Floor Area without Premiums (total project)	727,000	4.8:1

/a/ Existing landmark building. The height and maximum length and diagonal dimensions are lawfully non-conforming to the 1979 City Planning Code.

/b/ The 84-ft.-tall base would exceed the maximum lengths and diagonal dimensions to match the height and cornice line of the landmark building. The base would comply to these dimensions if lowered four ft. in height.

/c/ Maximum height, length and diagonal dimensions refer to the seventh-floor level mid-block on Spear St. The dimensions for floors one through six are included within the Office/Retail Base.

/d/ Residential tower would exceed maximum length and diagonal dimensions at the seventh through tenth floor levels only; only floors seven through 17 (11 stories) would extend above the six-story base.

/e/ The total height of the mechanical penthouse set back from Steuart St. is 19 ft.; atop the residential tower is 26 ft., and mid-block on Spear St. is 49 ft.

/f/ Totals do not include loading, mechanical space or 33,000 sq. ft. of basement parking in the landmark building and 167,000 sq. ft. of basement parking in the new construction because these uses are excluded from gross floor area under the City Planning Code.

/g/ The change in coffee manufacturing floor area would be 274,400 gross sq. ft., including 86,800 gross sq. ft. that would be demolished; and 154,600 gross sq. ft. of coffee manufacturing and 33,000 of basement storage space that would be converted into office and parking, respectively. The net change for each use on-site is not totaled because this number would not represent the total change in floor area on-site (590,200 gross sq. ft.); see discussion on p. 20.

/h/ See Note 11, p. 37, for FAR calculations.

SOURCE: Environmental Science Associates; Whisler-Patri Architects; and CEDEVCO

COST (1984 dollars)/4/

Estimated construction cost of the project would be about \$71 million exclusive of land, which is owned by the sponsor. Replacement cost for the entire project, including architectural and engineering fees, would be \$105 million dollars. Office space in the landmark building would lease for an average of \$28 per sq. ft. per year and in the new construction for an average of \$32 per sq. ft. The average leasing rate of the retail space would be \$22 per sq. ft. per year. The sponsor has not determined if the housing would be rental or purchase units. Assuming an average size of 850 sq. ft., the units would rent for an average of \$1,275 per month (\$18 per sq. ft. per year) or, if sold, would sell for an average price of \$212,500 (\$250 per sq. ft.).

F. APPROVAL REQUIREMENTS

Following public review and a public hearing on this Draft EIR, responses to all written and oral comments would be prepared, and the EIR would be revised as appropriate and presented to the City Planning Commission for certification. After EIR certification, the following approvals would be necessary for the project.

EXISTING CITY PLANNING CODE

Under the existing City Planning Code, project approval would require:

- Conditional Use authorization for consideration of the project as a Planned Unit Development (Sections 303 and 304 of the Planning Code), with exceptions to bulk requirements for the new construction; for parking deficiencies; and for construction of a residential use in an M-1 district;
- Issuance of a Certificate of Appropriateness (Section 1006 of the Planning Code), for exterior alterations to a designated City landmark; in this case, the Two Harrison St. building/5/;
- Height reclassification for construction of the 200-ft.-tall residential tower in the existing 105-ft. height district; and
- Height reclassification for construction of mechanical penthouses.

One or more public hearings would be held by the City Planning Commission to consider Conditional Use authorization for a Planned Unit Development (PUD) and for residential

use; the issuance of a Certificate of Appropriateness; and a recommendation on the height reclassifications. If the height reclassifications were recommended by the City Planning Commission, the Planning, Housing and Development Committee of the Board of Supervisors would hold public hearings on the reclassifications, and then refer the matter to the full Board of Supervisors and Mayor for action.

RINCON HILL PLAN

If the Rincon Hill Plan and its implementing ordinances were to be adopted/6/, approval of the project would require Conditional Use authorization (as specified in Section 245.2 of the proposed implementing ordinance); and issuance of a Certificate of Appropriateness. With the exception of mechanical penthouse heights, the new construction would comply with the height limits in the proposed Rincon Hill Plan. Revisions to the mechanical penthouse height requirements of the Rincon Hill Plan are currently under consideration by the Department of City Planning. Depending upon requirements of the adopted Rincon Hill Plan, height reclassifications may or may not be required for the mechanical penthouses of the project.

Upon project approval under either the existing code or the Rincon Hill Plan, the project sponsor would be required to obtain site and related permits from the Central Permit Bureau of the Department of Public Works (DPW). The redesignation of curbside loading space to serve the landmark building would require a formal request to the Director of Public Works, who would decide whether or not to approve the redesignation./7/ If housing were to be sold as condominium units, subdivision approval would be required prior to sale of the units.

NOTES - Project Description

/1/ San Francisco Department of City Planning, June 1984, Rincon Hill Plan - A Proposal for Citizen Review.

/2/ The exact amount of floor area that would be removed is undetermined. For purposes of this document, the total 250,000 sq. ft. of floor area in the landmark is used, and the floor area that would be removed for the interior courtyard is not considered.

/3/ The FAR was calculated as follows:

<u>Sq. Ft.</u>	
151,250	Base Site Area
15,625	Corner Premium ($1252 \times 4 \times .25$)
<u>+ 3,000</u>	Through-lot Premium (300×10)
169,875	Total Effective Site Area
<u>x 5</u>	FAR (5:1)
849,375	Total Maximum Allowable Floor Area
849,375 divided by 151,250 = 5.6:1 Allowable FAR	
727,000 divided by 169,875 = 4.3:1 Project FAR with premiums.	
727,000 divided by 151,250 = 4.8:1 Project FAR without premiums.	

/4/ Joe E. Erway, CEDEVCO, letter, May 1, 1984.

/5/ The proposed implementing ordinance of the Downtown Plan would modify Section 1006 of the existing City Planning Code by requiring that a Certificate of Appropriateness also be required for the interior alteration of a landmark building. Specifically, the "proposed (interior) work shall not adversely affect the special character or special historical, architectural, or aesthetic interest or value of the landmark and its site, as viewed both in themselves and in their setting . . ." San Francisco Department of City Planning, June, 1984, Proposed Amendments to the City Planning Code to Implement the Downtown Plan.

/6/ A Draft EIR on the Rincon Hill Plan was published on June 22, 1984 and a public hearing on the Draft EIR was held on June 26, 1984 (San Francisco Department of City Planning, Draft EIR for the Rincon Hill Plan, 82.39E, June 24, 1984). As of November 26, 1984, preparation of Responses to Comments on the Draft EIR were still in progress. Upon certification of the Final EIR, adoption of the policies and objectives of the Rincon Hill Plan would require Planning Commission approval to amend the Comprehensive Plan. Implementation of the proposed Plan would require designation of a Rincon Hill Special Use District, an action which requires approval by both the City Planning Commission and Board of Supervisors.

/7/ Nelson Wong, Associate Traffic Engineer, Department of Public Works, telephone conversation, October 9, 1984.

III. ENVIRONMENTAL SETTING

A. LAND USE AND ZONING

LAND USE

The project site is in the northeastern portion of the City, in an area of the South of Market (SOM) district known as Rincon Hill. The site is situated at the eastern edge of Rincon Hill, just west of The Embarcadero (see Figure 1, p. 18). Land use in the Rincon Hill area is predominantly low-scaled commercial and industrial uses, interspersed with surface-level parking and vacant lots. Many of the uses are maritime-related and warehousing operations, reflecting the history of Rincon Hill (and the entire SOM) as a major shipping center and, after 1906, as a warehousing and distribution center.

The site contains seven buildings and 55 surface-level parking spaces, all of which are occupied and owned by Hills. Total developed floor area existing on the site is 336,800 gross sq. ft. The landmark building and tower contain a total of about 250,000 gross sq. ft., including about 62,400 total gross sq. ft. of office space used for headquarters offices, 154,600 gross sq. ft. of coffee manufacturing space, and 33,000 sq. ft. of basement storage. The remaining six buildings and surface parking spaces are used for coffee manufacturing and employee parking, and would be demolished for the new construction (see Figures 11 and 12A, 12B and 12C, pp. 40-43). These six buildings contain about 86,800 total gross sq. ft. of coffee manufacturing space. The largest building is the Soco building, located at the corner of Spear and Folsom Sts. The Soco building contains about 59,090 gross sq. ft. of coffee manufacturing uses. Immediately east of this building is the 51-space Soco parking lot accessed from Steuart St. The other major buildings on the site are the three-story, metal addition (12,550 gross sq. ft.) to the landmark building, located west of the tower; and the Annex Building (7,680 gross sq. ft.), which faces Steuart St. Four surface-level parking spaces reserved for mailroom personnel of the landmark building are along the south side of the Annex building. The remaining

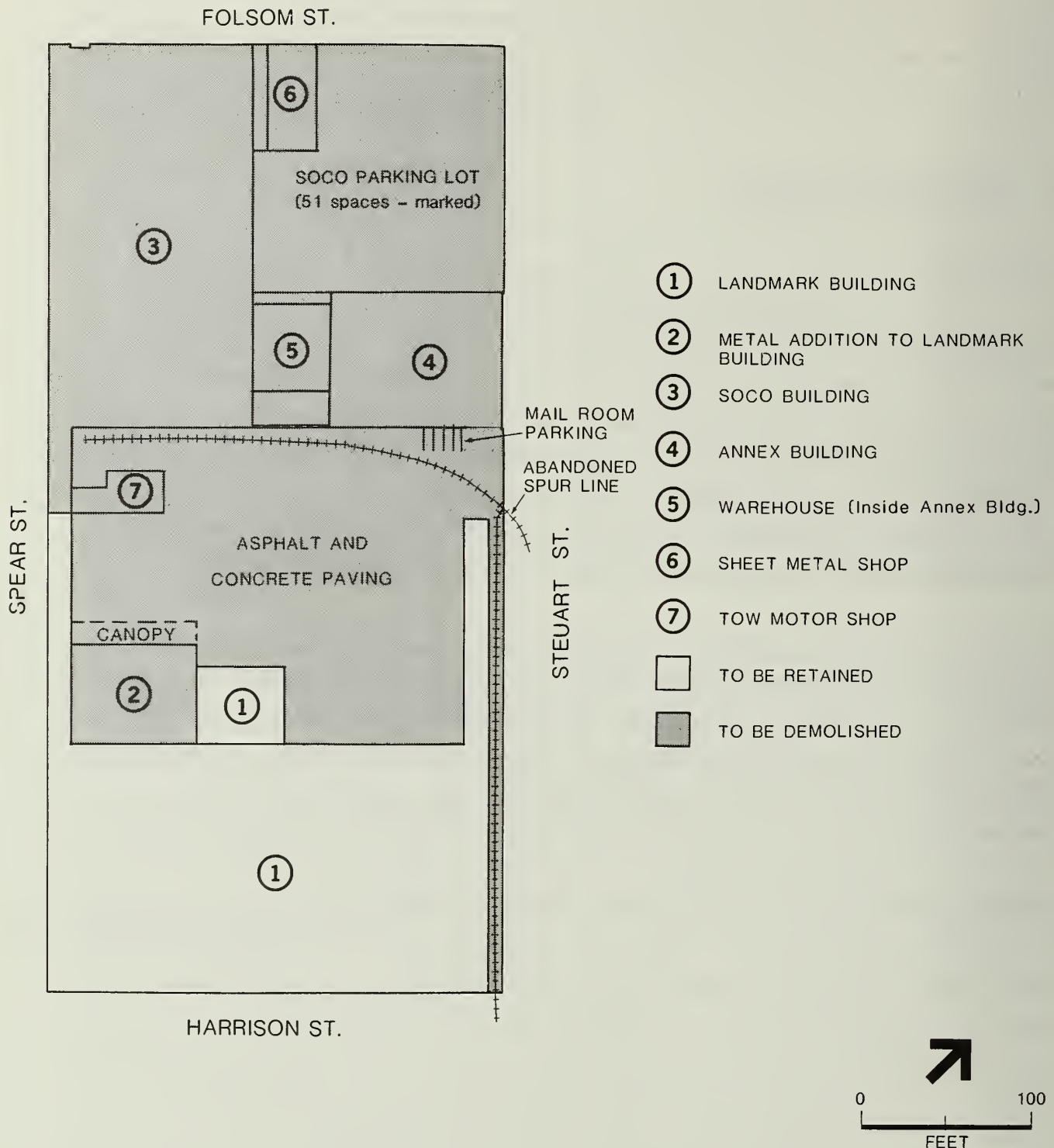


FIGURE 11
SITE PLAN OF EXISTING BUILDINGS

SOURCE: Hills Bros Coffee, Inc.,
Whisler-Patri Architects and ESA



▲ LANDMARK BUILDING

▲ ANNEX BUILDING

▲ SOCO BUILDING

NOTE: A parking lot on Block 3743 is shown between
The Embarcadero and the Project Site.

SOURCE: ESA

FIGURE 12A
VIEW OF PROJECT SITE FROM THE EMBARCADERO



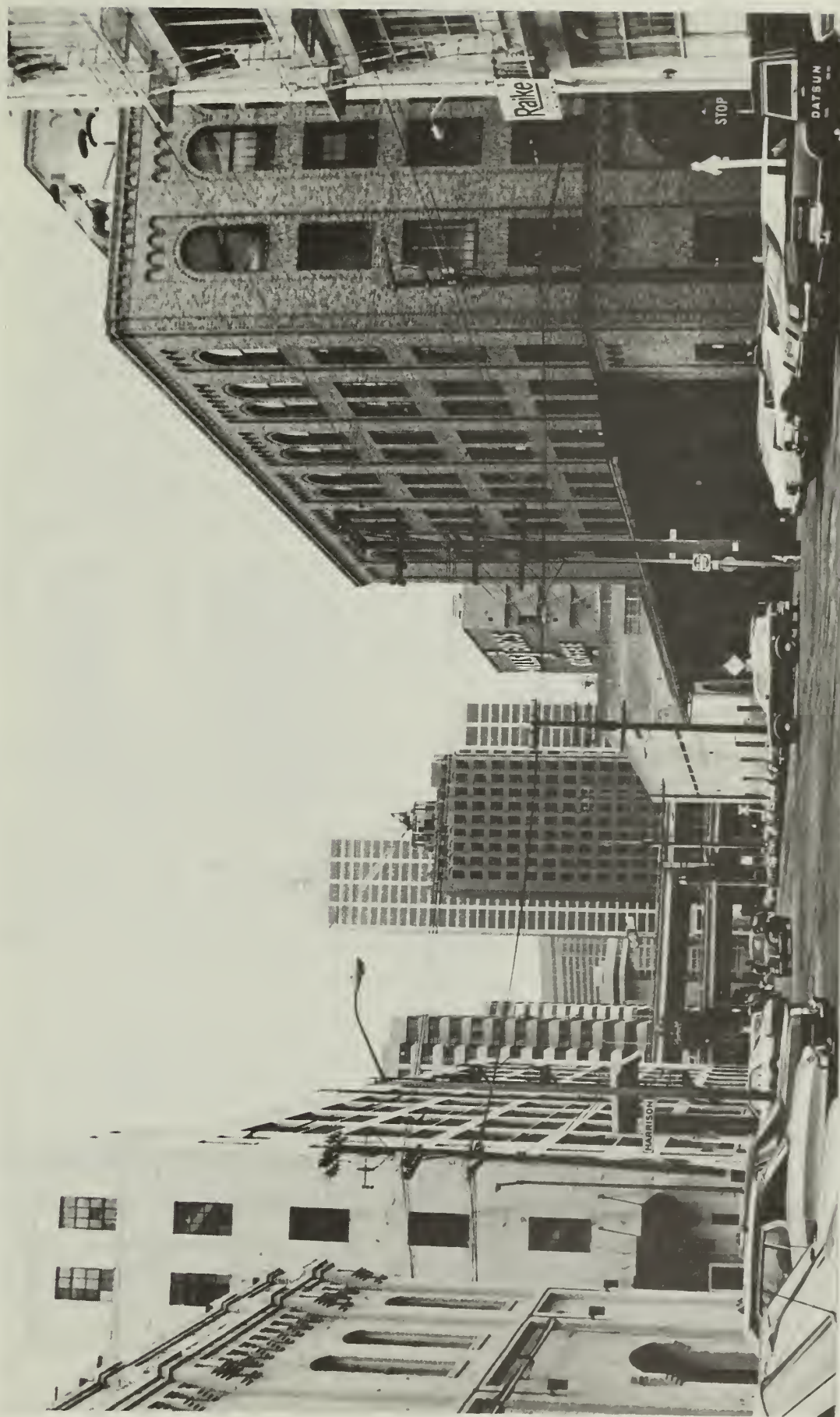
▲ SHEETMETAL SHOP

▲ SOCO BUILDING

▲ LANDMARK BUILDING

FIGURE 12B
VIEW OF PROJECT SITE FROM
SPEAR AND FOLSOM STREETS

SOURCE: ESA



101 HARRISON
HATHAWAY
WAREHOUSE

ONE MARKET 201 SPEAR
PLAZA
(background) construction

LANDMARK BUILDING

59 HARRISON
JOSEPH MAGNIN
WAREHOUSE

FIGURE 12C
VIEW OF PROJECT SITE ON SPEAR STREET
NEAR HARRISON STREET

SOURCE: ESA

four buildings include a warehouse (2,700 gross sq. ft.), wholly contained within the Annex building (see Figure 11, p. 40); a sheet metal shop (3,480 gross sq. ft.); and a motor shop (1,305 gross sq. ft.). An abandoned railroad spur runs parallel to the site on Steuart St. and crosses onto the site.

East of the project site, across Steuart St., is a surface parking lot containing roughly 120 spaces. This lot is on Block 3743 which is owned by the Port of San Francisco (Port) and leased to Hills on a year-to-year basis for employee parking. Farther east is The Embarcadero and, along the Bay shoreline, a promenade owned by the Port. The promenade extends about 1,670 ft. from the Ferry Building to just south of Harrison St., and is used by pedestrians, joggers and brown baggers, particularly during the noon hour. The block west of the site contains bus parking for the Golden Gate Bridge Highway and Transit District, and a vacant four-story federal office building. North of the site is the Embarcadero Skyway and surface parking lots. South of the site is the western end of the San Francisco-Oakland Bay Bridge and the Interstate 80 Skyway. The Joseph Magnin Warehouse building at 59 Harrison St. occupies the block south of the project block; except for three short-term tenants, this building is vacant. Figure 13, p. 45 shows land uses in the project area.

In recent years, the portion of the South of Market area east of Fourth St. and north of Townsend St. has experienced rapid encroachment by office and commercial uses expanding from the Financial District. This expansion, coupled with major non-industrial developments such as Yerba Buena Center, has caused building and land values South of Market to escalate. However, land uses in the Rincon Hill area have remained fairly stable. Most of the new office and commercial uses in the South of Market are located north of Folsom St. between Fourth St. and The Embarcadero.

Located in the general vicinity of the project are the sites of 11 approved and/or proposed office and residential developments, including conversions (see Figure 14, p. 46). These developments, upon full buildout, would provide about 2.1 million net new gross sq. ft. of office space, and about 30,000 net new gross sq. ft. of retail space, and 192,000 net new gross sq. ft. (280 units) of residential space. ("Net new" refers to the increase in office and retail floor area after subtraction of office and retail space demolished to clear sites for the new buildings.) These proposed projects are indicative of the expansion of office growth into the South of Market.

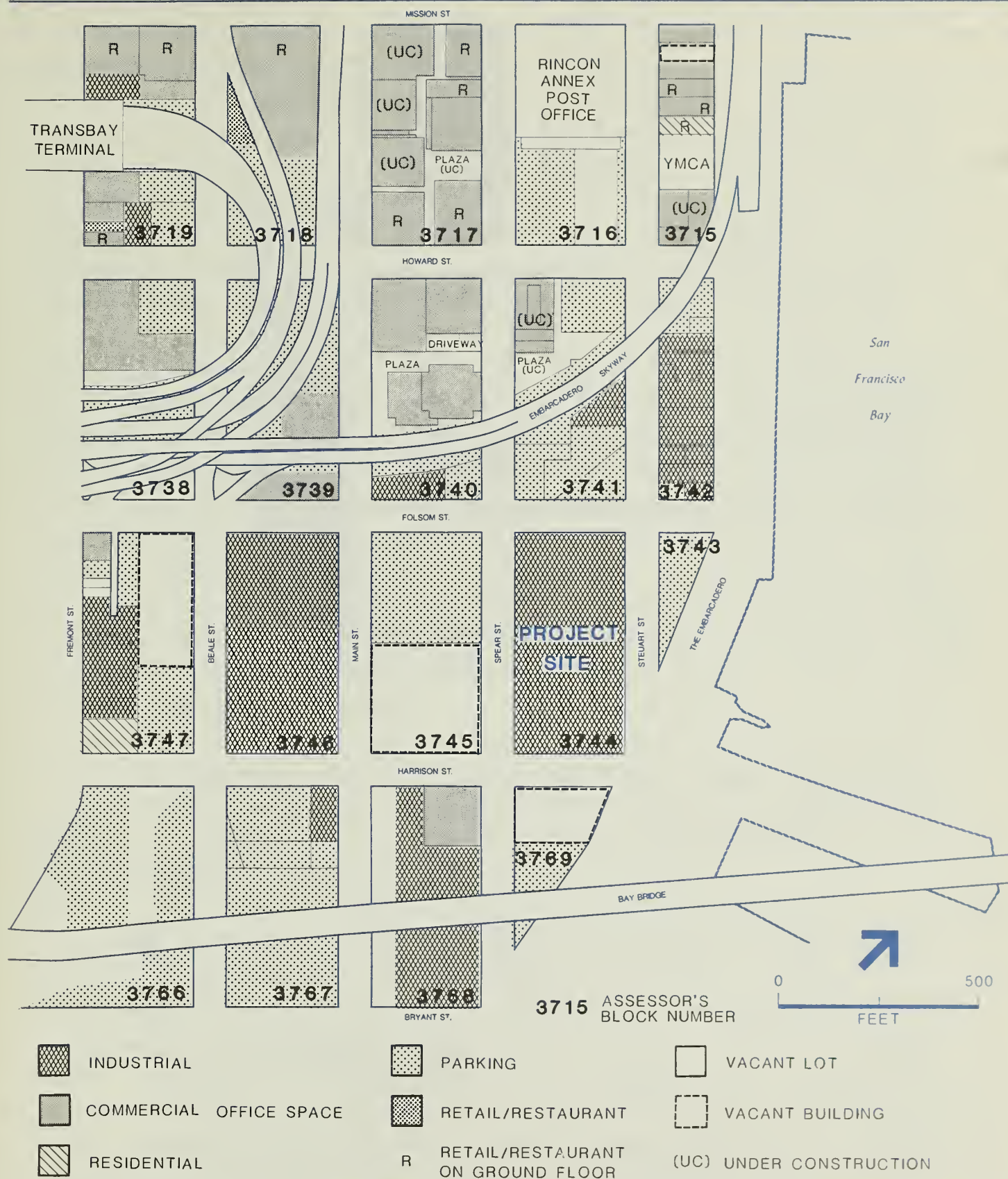


FIGURE 13
EXISTING LAND USE

SOURCE: RINCON HILL PLAN AND ESA

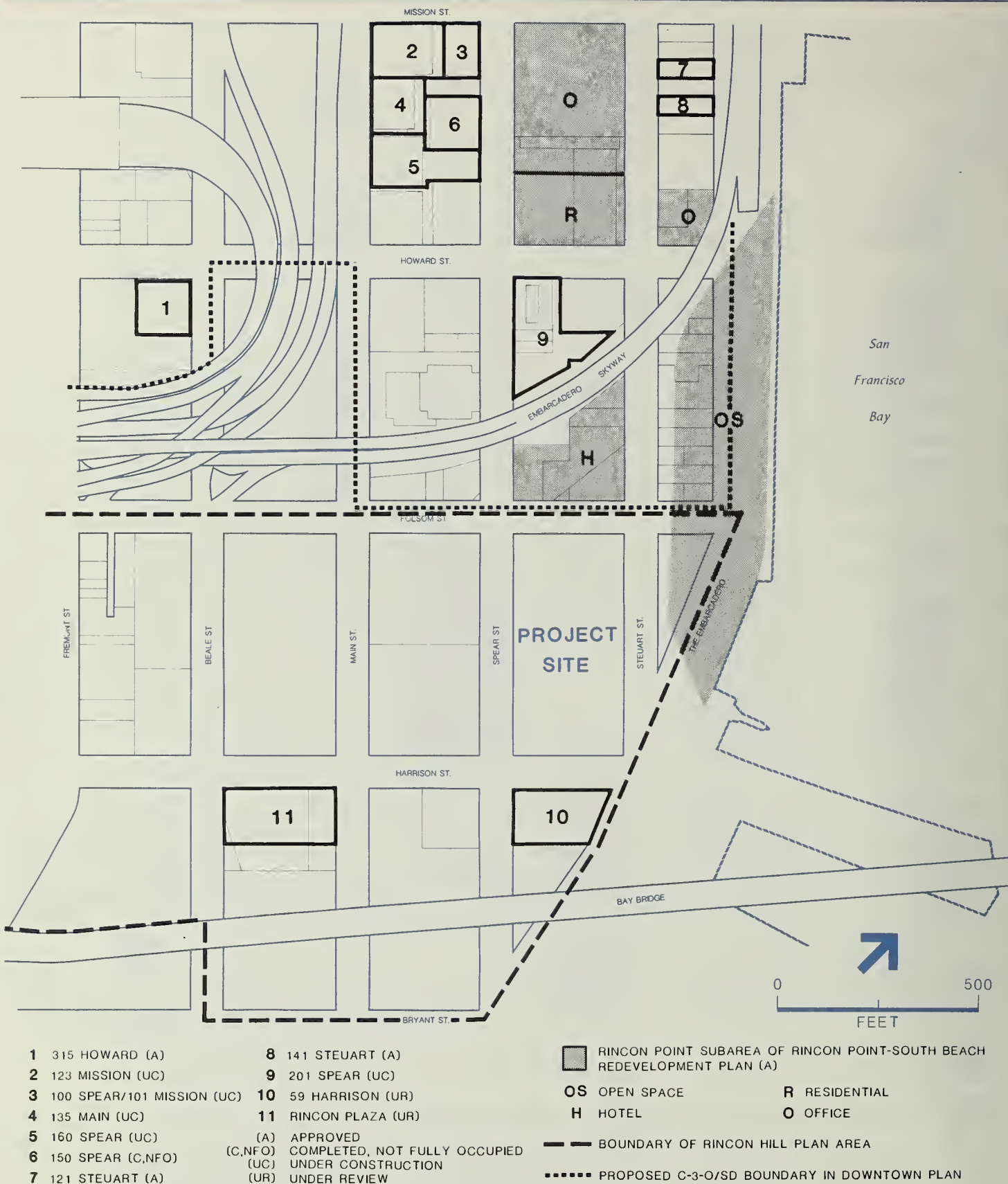


FIGURE 14
PROPOSED DEVELOPMENT AND
PLAN AREAS IN THE PROJECT VICINITY

SOURCE: ESA

PLANNING CONTEXT

The project site is at the junction of several proposed and approved planning areas. The site is within the Commercial/Industrial district of the proposed Rincon Hill Plan (Rincon Hill Plan, A Proposal for Citizen Review, June 1984, prepared by the Department of City Planning; hereinafter referred to as the Rincon Hill Plan). The Rincon Hill Plan proposes a mixed-use, predominantly residential, neighborhood in the area roughly encircled by the Bay Bridge, Embarcadero Freeway, and The Embarcadero (see Figure 1, p. 18).

The Hills site also is immediately adjacent to the Folsom St. boundary of the existing C-3-S (Downtown Support) district, which is proposed for expansion of the C-3-O district (Downtown Office) in the Downtown Plan (August 1983). The current boundary of the C-3-O district is three blocks north of the project site on Mission St. This new boundary would establish a C-3-O Special Development (SD) district between Howard and Folsom Sts., east of the Yerba Buena Center Redevelopment Area. The SD district is intended to serve as an extension of the downtown office district that would be a receiver area for the transfer of development rights from architecturally significant and contributory buildings or under certain conditions, from unrated buildings, in conservation districts. The Downtown Plan also indicates the northern two thirds of the project site as an area for new housing near downtown./1/

The site is within the general area that would be affected by the I-280 Transfer Concept program. This Program examines a range of alternatives, each of which would alter the current use and alignment of The Embarcadero in the project vicinity (see p. 58 for further discussion)./2/

The Rincon Point Subarea of the Rincon Point - South Beach Redevelopment Plan (EE80.267; as amended January 1984) is immediately east and north of the site. Approved uses in the Rincon Point Subarea are a 400- to 800-room hotel opposite the site on Folsom and Steuart Sts.; a 4-1/2 acre waterfront park between Steuart St. and The Embarcadero, roughly extending from Howard to Harrison Sts. (also designated as open space in the Downtown Plan); commercial, office and residential uses on Block 3716 occupied by the Rincon Annex, bounded by Mission, Steuart, Howard and Spear Sts.; and commercial use on Steuart St., north of Howard St. (see Figure 14, p. 46). The Redevelopment Plan also calls for re-routing The Embarcadero along Steuart St. from Howard to Harrison./3/ No

specific projects have been proposed for any of these sites at present; however, the hotel development and office/residential uses on the Rincon Annex block, and the office site at Steuart and Howard Sts. are in preliminary negotiation stages between the Redevelopment Agency and developers./4/

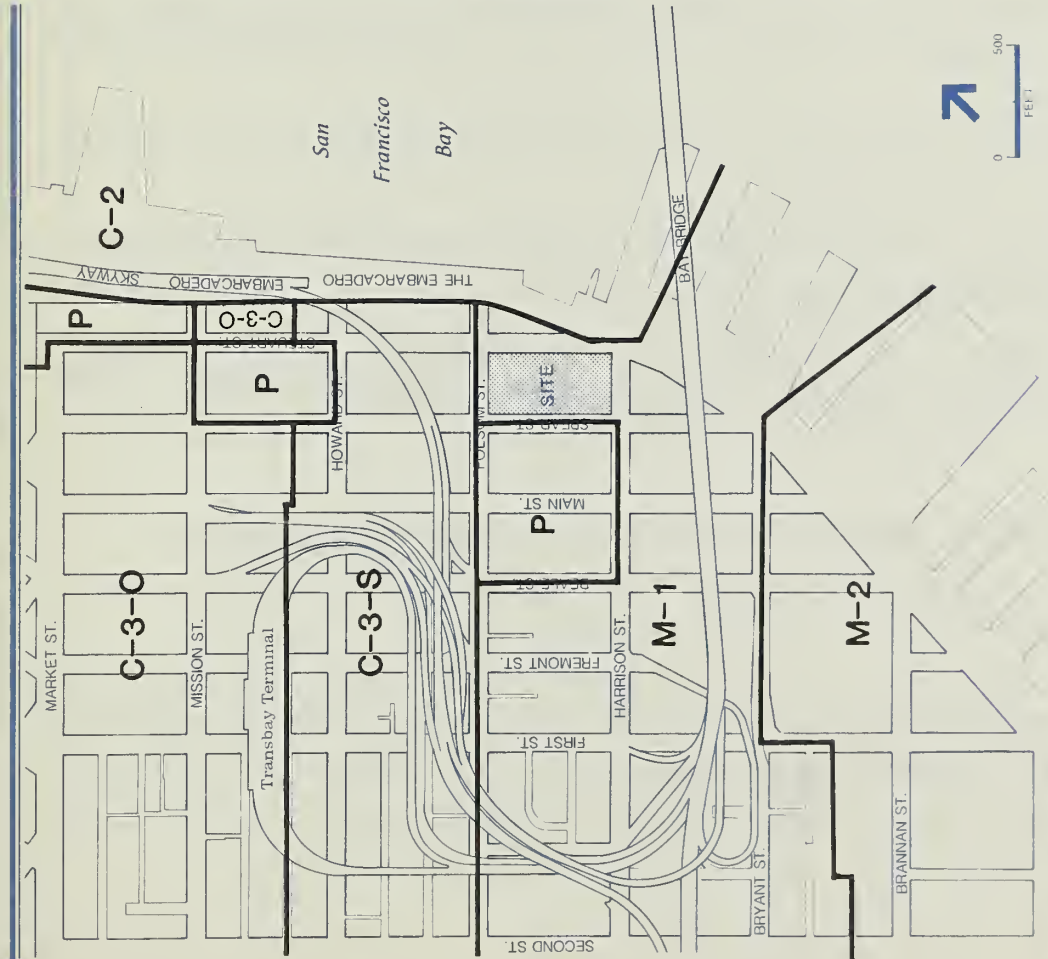
The project is subject to objectives and policies stated in the Commerce and Industry, Urban Design, Open Space, Northeastern Waterfront (as amended), and Residence Elements of the San Francisco Comprehensive Plan. For a detailed discussion of these policies, see Section IV.A. pp. 74-76. Development of the project site is also subject to the off-street parking and loading policies under City Planning Commission Resolution 9286 and policies of the Transportation Element. These policies are discussed in detail in Section IV.F., Transportation, Circulation and Parking Impacts on pp. 103, 106, and 130-131.

ZONING

The City Planning Code Use classification for the site and surrounding area south of Folsom St. is M-1, Light Industrial (see Figure 15, p. 49). The area north of Folsom is currently zoned C-3-S (Downtown Support). In an M-1 District, professional and business offices and retail business and personal service establishments are permitted as principal uses; residences are permitted as a conditional use. The basic Floor Area Ratio (FAR) in an M-1 district is 5.0:1, meaning that the total gross floor area of all buildings on the lot may be five times the area of the site.

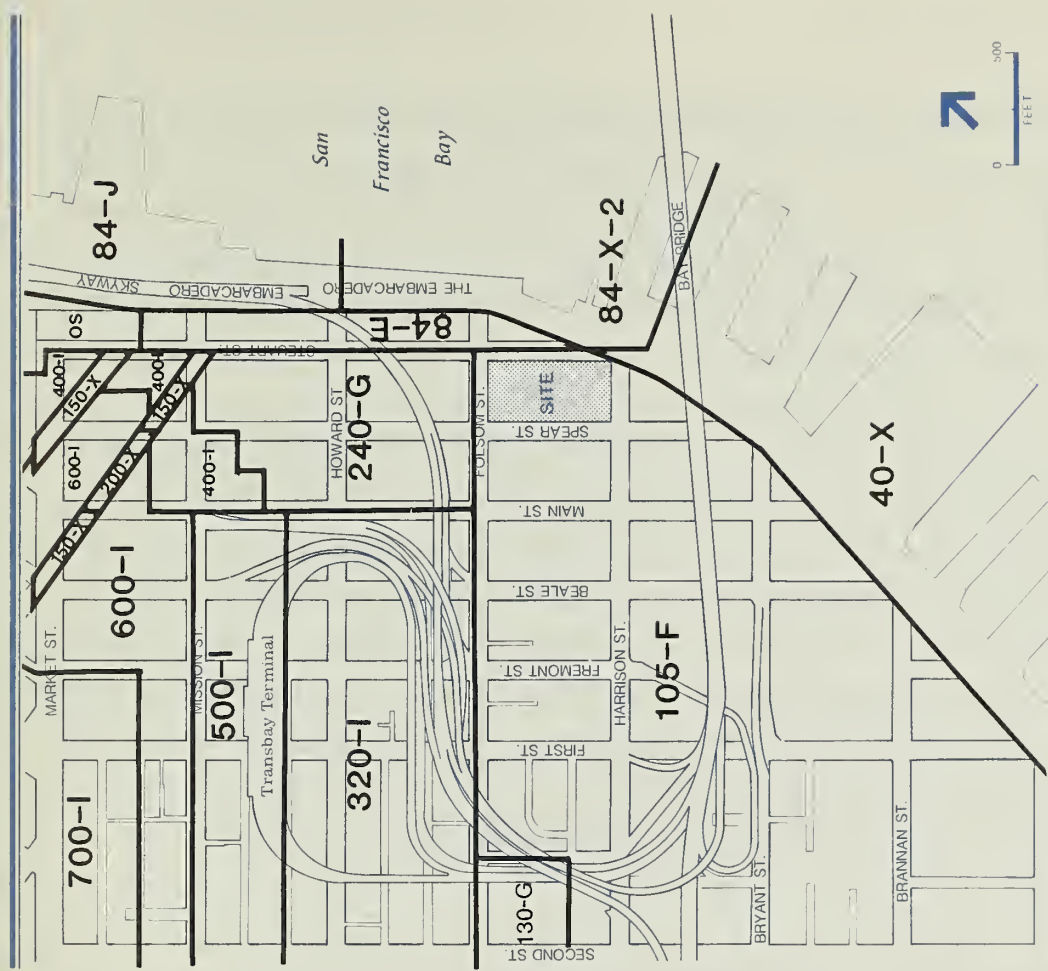
The project is in a 105-F Height and Bulk district. Hence, the maximum allowable building height is 105 ft. and the maximum allowable building length and diagonal dimensions above 80 ft. are 110 ft. and 140 ft., respectively (see Figure 15, p. 49).

On May 27, 1982, the San Francisco City Planning Commission passed Resolution No. 9403, which imposed two-year interim controls on the Rincon Hill Plan area, restricting all new development to comply with the RC-2 (Residential-Commercial Combined, Moderate Density) zoning district. Resolution 9403 states "these interim controls shall not apply to a project involving commercial redevelopment of Assessor's Block 3744 (the project block) and relocation of manufacturing operations of Hills Brothers to another site within the City and County of San Francisco." These controls expired on May 27, 1984. On July 26, 1984, the City Planning Commission adopted Resolution No. 10069, which established new one-year interim controls restricting



- P** PUBLIC USE DISTRICT
- C-2** COMMUNITY BUSINESS DISTRICT
- C-3-O** DOWNTOWN OFFICE DISTRICT
- C-3-S** DOWNTOWN SUPPORT DISTRICT
- M-1** LIGHT INDUSTRIAL DISTRICT
- M-2** HEAVY INDUSTRIAL DISTRICT

SOURCE: San Francisco Planning Code



- NUMBERS INDICATE HEIGHT LIMITS. LETTERS INDICATE BULK LIMITS AS FOLLOWS:**
- | LETTER | HEIGHT ABOVE WHICH MAX. DIMENSIONS APPLY | MAX. BLDG. LENGTH | MAX. DIAGONAL DIMENSION |
|--------|---|-------------------|-------------------------|
| E | 65 | 110 | 140 |
| F | 80 | 110 | 140 |
| G | 80 | 170 | 200 |
| I | 150 | 170 | 200 |
| J | 40 | 250 | 300 |
| X | BULK LIMITS NOT APPLICABLE | | |
| X-2 | SPECIAL EXCEPTION - SEE SECTION 263.3 OF THE PLANNING CODE | | |
| OS | CONFORMITY WITH OBJECTIVES, PRINCIPLES AND POLICIES OF THE MASTER PLAN. | | |

SOURCE: San Francisco Planning Code

FIGURE 15
PLANNING CODE
HEIGHT AND
BULK DISTRICTS

development in the proposed Residential Districts (Mid-rise and High-rise) of the Rincon Hill Plan to comply with the RC-3 (Residential-Commercial Combined, Medium Density) zoning district. The Commerical/Industrial district of the Rincon Hill Plan, which includes the project site, is exempt from these interim controls. Therefore, prior to adoption of the Rincon Hill Plan, development of the site would be subject to existing M-1 controls.

The sponsor intends to request a Conditional Use for a Planned Unit Development (PUD) designation of the project. For a PUD, projects must be on sites of at least 1/2 acre, developed as integrated units and designed "to produce an environment of stable and desirable character which will benefit the occupants, the neighborhood and the City as a whole." Section 304(a) of City Planning Code further provides that, "In cases of outstanding overall design, complementary to the design values of the surrounding area, such a project may merit a well reasoned modification of certain of the provisions" of the Planning Code. A PUD is not exempt from any height limit established by Article 2.5 or the Code unless explicitly authorized by the terms of the Code.

NOTES - Land Use and Zoning

/1/ San Francisco Department of City Planning, November 1983, The Downtown Plan, Proposal for Citizen Review, pp. 27-29; and p. 44, Map 9; and changes in the October 1984 Downtown Plan.

/2/ California Department of Transportation, I-280 Transfer Concept Program, Working Paper: Subtask 2.2.2, January 28, 1983.

/3/ San Francisco Redevelopment Agency, as amended, January 1984, Rincon Point - South Beach Redevelopment Plan. Board of Supervisors of City and County of San Francisco Ordinance No. 50-84, January 23, 1984.

/4/ Frank Cannizzaro, Project Manager, Rincon Point - South Beach Redevelopment Area, San Francisco Redevelopment Agency, telephone conversation, October 10, 1984.

B. ARCHITECTURAL RESOURCES, URBAN DESIGN AND VISUAL QUALITY

ARCHITECTURAL RESOURCES AND URBAN DESIGN

The southern third (approximately) of the project block is occupied by the Hills Bros. Coffee, Inc. landmark building at Two Harrison St., the largest structure on the site. It was constructed in 1924 by the architectural firm of George Kelham as a steel frame,

brick-clad structure featuring romanesque architecture and brick detailing. On the Spear and Steuart St. frontages, there are a series of double-level, arched bays, with six freestanding bays which extend from the main structure. These decorative bays function as loading docks and service entrances to the landmark building. Atop the landmark building is a freestanding metal "Hills Bros. Coffee" sign anchored onto a mechanical penthouse, which also features romanesque detail. Extending from the northern side of the landmark structure is a pitched-roof solid-brick tower that reaches 162 ft. at the top of the parapet, and 175 ft. at the tip of the roof. The tower includes a top walkway lined by a series of roman arches (see Figure 16, p. 52). The main structure, the sign and the tower are designated City landmarks and have received a Determination of Eligibility notification from the National Register of Historic Places. The landmark building has received a rating of "3" in the Department of City Planning's City-wide 1976 Architectural Survey.^{/1/} In that survey, approximately seven percent of the City's entire stock of buildings were awarded a rating for architectural merit ranging from a low of "0" to a high of "5". The total number of buildings which were awarded ratings of "3", "4" and "5" represent less than two percent of the City's entire building stock (see Appendix B, p. A-30).

The project site and surrounding area are not included in the 1979 Foundation for San Francisco's Architectural Heritage (Heritage) survey of buildings of architectural and historic merit, as that survey encompassed only the Downtown C-3 zoning districts, which currently ends at Folsom St. Under contract with the Department of City Planning, Heritage has since expanded its survey boundaries and has conducted preliminary ratings of buildings in the South of Market area, south of Folsom St. These ratings are not officially adopted yet, and are currently under review and subject to approval by the Department of City Planning.^{/2/} The Hills landmark building received a preliminary "A" rating. This preliminary survey rating, as with the original 1979 survey, rated historically or culturally significant buildings built after 1945 from a high of "A" to a low of "D".

The remaining street frontage along Spear St. is occupied by the Soco building. This is a high-ceilinged, one- and two-story, reinforced concrete building, which features a blank concrete base (about 55 ft. in height) above which is a high-ceilinged building portion which carries the widely visible "Hills Bros. Coffee" inscription and logo that reaches a total height of about 115 ft. The five other buildings on the site, not readily visible from street-level, are one- to two-story, reinforced concrete buildings constructed



FIGURE 16
VIEW OF LANDMARK BUILDING FROM
SPEAR AND HARRISON STREETS

SOURCE: ESA

within the past twenty years (see Figures 12A, 12B, and 12C, pp. 41-43), ranging in height from 20 to 90 ft. None of these buildings have received ratings from the Department of City Planning or Heritage.

These reinforced concrete buildings contrast sharply with the detailed brick architecture of the landmark structure and other older warehouses in the project vicinity. The Hathaway Warehouse, located at 101 Harrison across the Harrison and Spear Sts. intersection from the site, mirrors the intricate brick design of the Hills landmark building. Constructed as early as 1860, this building is possibly the oldest warehouse in the City. It received a rating of "3" in the Department of City Planning's Survey, and a preliminary rating of "A/B" from Heritage. The five-story Joseph Magnin Warehouse at 59 Harrison St. south of the project site, and the four-story vacant federal office building across Spear St. from the site, both feature well-proportioned facade designs and balance the massing of the Hills landmark building. The Joseph Magnin Warehouse received a "2" from the City and a preliminary "B" from Heritage; the federal office building has not been rated by the Department of City Planning or Heritage.

Other rated buildings in the project site vicinity include the Union Oil Company building at 425 First St. and Sailor's Union of the Pacific building at 450 Harrison St., both of which received a rating of "4" in the City-wide survey; Heritage has given the Union Oil Company building a preliminary "A/B" rating; the Sailor's Union building was constructed after 1945 and was not eligible for a Heritage rating. Buildings in the Rincon Hill area which received a rating of "2" in the 1976 City survey include 66-68 and 70-76 Lansing St., 33 Second St. and 501 Folsom St. Other notable structures include Klockars Blacksmith and Metal Works built in 1912 at 443 Folsom St., which received a rating of "1" in the City's survey and subsequent designation as a City landmark. It received a preliminary "B" rating from Heritage.

VISUAL QUALITY

The newer buildings on the project site are visually unrelated to the landmark building, especially when viewed from the west and northwest. In contrast, the landmark building, when viewed from The Embarcadero, strongly defines the low-rise industrial scale of the Rincon Hill area. Views of the project site and area are limited by the multiple-level overhead ramps of the Embarcadero Skyway and Bay Bridge.

The presence of the Hills landmark tower, the Sailor's Union of the Pacific building and the Union 76 tower provide visual focal points for the Rincon Hill area. With the exception of these three structures, existing buildings in the Rincon Hill area are generally not visible beyond the buildings and street segments in the immediate vicinity.

The project area is dominated by low-rise industrial buildings of concrete, wood, and brick construction materials, which range from two to six stories. There is a sharp visual contrast to the low-rise industrial buildings south of Folsom St. and the high-rise structures located to the north, across the Embarcadero Skyway (see Figure 12C, p. 43).

NOTES - Architectural Resources, Urban Design, and Visual Quality

/1/ For a detailed discussion of both the Department of City Planning's and the Foundation for San Francisco's Architectural Heritage's rating systems, please see Appendix B, p. A-30.

/2/ Michael Corbett, Foundation for San Francisco's Architectural Heritage, telephone conversation, July 24, 1984.

C. SHADOWS

Existing structures on the site cast shadows on lower structures, streets, and sidewalks in the project vicinity. The existing structures create shadows on Spear, Folsom, Steuart, and Harrison Sts. and The Embarcadero during different times of day in certain seasons of the year. Existing structures also shade portions of the block immediately to the north. To the northeast, existing shadows (including those from the landmark building) are cast on portions of The Embarcadero roadway, a promenade along the shoreline, and the San Francisco Bay. Existing and project shadow patterns for various times of the day and year are discussed in detail in Section IV., C. Environmental Impacts, pp. 84-97, and are shown in Figures 20A-21D.

On June 5, 1984, Proposition K, the Park Shadowing Initiative Ordinance, was passed by the voters in San Francisco. Generally, Proposition K prohibits issuance of a building permit for structures that will cast any shade or shadow upon property under the jurisdiction of, or designated for acquisition by, the Recreation and Park Commission unless the City Planning Commission first holds a hearing and determines that any adverse impact on the use of the property because of the shading or shadowing would be

insignificant. The Planning Commission would not make a determination of significance until the Recreation and Park Commission reviewed and commented on the project.

The closest property under the jurisdiction of the Recreation and Park Commission are the Ferry Park and Justin Herman Plaza, both of which are located north of Mission St. along The Embarcadero (see Figure 19, p. 85). The existing shoreline promenade east of The Embarcadero is currently under the jurisdiction of the Port of San Francisco; no future acquisition of the promenade is proposed by the Recreation and Park Department./1/

Currently there are no plans to develop the potential 4-1/2 acre waterfront park site in the Rincon Point Redevelopment Subarea/2/, nor is it proposed for future acquisition by the Recreation and Park Department./1/

NOTES - Shadows

/1/ Open Space Acquisition and Park Renovation Fund, Fiscal Year 1983-84, July 19, 1983, prepared by the Recreation and Park Department in cooperation with the Citizens' Open Space Advisory Committee, and Timothy Lillyquist, San Francisco Park and Recreation Department, telephone conversation, August 15, 1984.

/2/ Frank Cannizzaro, Project Manager, Rincon Point - South Beach Redevelopment Area, San Francisco Redevelopment Agency, telephone conversation, August 20, 1984.

D. HISTORIC AND ARCHAEOLOGICAL RESOURCES/1/

In June 1984, a cultural resources evaluation was conducted to determine whether potentially significant cultural materials could be identified within the project boundaries./1/ A review of available archival and documentation materials indicated that the possibility of potentially significant cultural materials existing within the project boundaries is low, with the exception of relics from the Gold Rush Period (1849-1857). Historic activities on the site during this period are summarized below.

During the Gold Rush period, San Francisco was the scene of a building and population explosion. The Rincon Point area was the center of a brisk shipbreaking business. The first detailed view of the site is provided by the 1853 U.S. Coast Survey map, which shows the eastern three-fourths of the property still under water; no Bay fill had occurred yet in the vicinity of Rincon Point.

The 1853 U.S. Coast Survey map shows that there were two small structures located within the boundaries of the project site at that time. One was located adjacent to the Spear St. property line midway between Harrison and Folsom Sts. and the other was approximately 20-25 ft. northeast from the first. Neither the 1853 Coast Survey map nor archival search provide information concerning these structures, the date that they were built, their size and function, or the type of construction.

The 1859 U.S. Coast Survey map shows that a large amount of fill had occurred since the 1853 U.S. Survey map. The 1869 U.S. Coast Survey map, showing the Rincon Point area in 1867-1868, reveals that the project site had been developed extensively. A large warehouse was located at the southwestern corner of the site. Two roughly square structures stood side-by-side along the Folsom St. frontages near its intersection with Steuart St. A larger rectangular structure, perhaps a loading platform or warehouse, could be identified on the northside of Steuart, near Folsom, as well as a number of small structures on the western half of the block near Spear St. It is not possible to determine if the two structures shown in the 1853 Coastal Survey map were still present on the site at the time the 1869 map was completed.

Although no information exists regarding the functions of the buildings on site, it is known that during the 1850s the area around Steuart St. was devoted primarily to the lumber business and it is likely that these buildings were related to the lumber industry.

A review of the 1869 San Francisco City Directory indicates that the Black Diamond Coal and Mining Company began occupying the site in 1869, and continued to occupy the site until at least the late 1870s. By 1887, the S. H. Harmon Lumber Company occupied the northeastern quadrant of the project block and the remainder of the site was occupied by the Pacific Pine Lumber Company. Hills Bros. Coffee, Inc. took over the property sometime around the turn of the century, and has remained on the site ever since.

NOTE - Historic and Archaeological Resources

/1/ This section is summarized from Hills Plaza Cultural Evaluation, June 20, 1984, prepared by Archeo-Tec, Consulting Archaeologists. This report is on file and available for public review at the Office of Environmental Review, 450 McAllister St., Fifth Floor.

E. TRANSPORTATION, CIRCULATION AND PARKING

The Hills Plaza site is served by local streets and by arterial streets which connect with the regional freeway system (see Figure 1, p. 18). The Bay Bridge (I-80) provides access to and from the East Bay. There is an off-ramp from the Bay Bridge on Fremont St. at Harrison St., an on-ramp on First St. at Harrison St. and an on-ramp for high-occupancy vehicles (HOV) on Sterling St. at Bryant St. The James Lick Skyway (I-80) connects with U.S. 101 (Central Freeway) to the North Bay and the Peninsula. There is an on-ramp to the Central Freeway at the intersection of Fourth and Harrison Sts. and an off-ramp at the intersection of Fourth and Bryant Sts. The Embarcadero Freeway (SR 480) on-ramp at Beale and Folsom Sts. and off-ramp at Fremont and Folsom Sts. provide a freeway connection to Broadway and the northeastern waterfront area.

The project site is the block bounded by Folsom St. on the north, Steuart St. on the east, Harrison St. on the south and Spear St. on the west. The curb-to-curb (roadway) width of Folsom St. is 62 ft., Steuart St. is 52 ft., Spear St. is 52 ft., and Harrison St. is 76 ft.

Folsom St. is a four-lane arterial which operates one-way eastbound between Eleventh St. and the Embarcadero. Folsom St. is classified as a Primary Vehicular Street, a Transit Preferential Street and a Preferred Commuter Bicycle Route in the Transportation Element of the San Francisco Master Plan./1/ Harrison St., a two-way, four-lane street, is classified as a Primary Vehicular Street, and provides access to the Bay Bridge and Central Freeway ramps at First, Essex, Fourth and Seventh Sts. Because the on-ramps at First/Essex and Harrison Sts., are the easternmost ramps providing access to the Bay Bridge (which attract motorists attempting to by-pass congestion on the Central Freeway), westbound traffic on Harrison St. backs up during the evening peak period (4:00 to 6:00 p.m.) past Fremont St. on the approach to the First St. ramp and backs up eastbound on Harrison to Second St. approaching the Essex St. ramp. The frequency and duration of peak-period queues at these locations varies seasonally and daily depending on the traffic flow on the Bay Bridge. On days when the flow on the Bay Bridge is uncongested, there is little to no queuing at these ramps; when an incident blocks one or more lanes on the Bay Bridge, queues can extend beyond the limits described above.

Spear St., on the west side of the site, is one-way southbound. It has two travel lanes with parking and loading areas on each side. Steuart St. is a two-lane two-way local street on the east side of the site. Steuart St. is classified as a Transit Preferential Street, as it is part of the proposed alignment for the Muni Metro extension to Fourth and Townsend Sts. (see discussion below).

Steuart St. and Harrison St. intersect The Embarcadero at the southeast corner of the project site. The Embarcadero is a four-lane arterial which is classified as a Primary Vehicular Street and a Transit Preferential Street. It is the major through route along the waterfront from China Basin to Fisherman's Wharf. A pedestrian promenade is located along the east side of the Embarcadero from Harrison St. north to the Ferry Building.

The intersections in the vicinity of the project are controlled by stop signs and operate in relatively good conditions during peak periods. Existing and projected intersection levels of service are shown below in the transportation impact analysis, Table 9, p. 123.

Several changes have been proposed which would affect the street network in the project vicinity. These include:

- realignment of The Embarcadero onto the present Steuart St. alignment./2/
- reconstruction of Spear St. as a two-way, two lane street with wide sidewalks and a narrowed travel way./3/
- removal of the Embarcadero Freeway north of Howard St., with a new off-ramp to Folsom St. at Spear St./2/

The Embarcadero realignment would remove Steuart St. as a local circulation route and would bring heavy traffic volumes closer to the site. Spear St., as a two-way roadway, would allow traffic to exit the Hills Plaza garage in either direction and would reduce project impacts on Harrison St. Removal of the Embarcadero Freeway would substantially increase traffic volumes on The Embarcadero and would increase congestion at the Bay Bridge on-ramps. A replacement off-ramp at Folsom St. west of the site would substantially increase traffic volumes on the north side of the project. The replacement off-ramp would require signalization of the intersection of Folsom St. with the Embarcadero./2/

III. Environmental Setting

Muni operates six motor coach and trolley coach lines within walking distance (one-quarter mile or 1,320 ft.) of the project site during weekday peak periods (see Figure 17, p. 60). Table 8, p. 118, summarizes existing (1984) p.m. peak-hour and peak-period (4:00 to 6:00 p.m.) ridership and operating conditions for the transit agencies' routes that serve the downtown area.

Muni bus stops within one-quarter mile of the proposed project are located on Main, Beale, Fremont, Market, Mission, Howard, Folsom and Bryant Sts., and on The Embarcadero. One Muni route, the 32-Embarcadero, operates in the immediate site vicinity. This route is used by City residents and by commuters who use regional transit routes and transfer to Muni. The 32-Embarcadero runs along the Embarcadero and has stops at Folsom and Harrison Sts. within 300 ft. of the project site.

Future improvements to the Muni system are proposed that would greatly alter transit access in the project vicinity. As discussed in the Muni Short Range Transit Plan 1984-1989 (San Francisco Public Utilities Commission, 1984), the 32-Embarcadero is proposed to be replaced by the E-Line, which would provide streetcar service along the reconstructed (and realigned) Embarcadero roadway, and Muni Metro is proposed to be extended from the Embarcadero station of the Market St. subway to the vicinity of Fourth and Townsend Sts. along an alignment that would use Steuart St. in the project vicinity. The location of the Muni Metro portal (breakout) which would bring the Metro tracks from the subway to the surface has not been fixed at this time. The alternative proposals under review by Muni would locate the portal on Steuart St. somewhere between Mission St. and the Bay Bridge./4/

The Transbay Transit Terminal, within 2,500 ft. of the proposed project, serves as a depot for AC Transit, SamTrans, Golden Gate Transit and several Muni lines. The Embarcadero BART station is within 2,500 ft. of the proposed project and provides access to BART's Westbay and Transbay lines, as well as Muni Metro Lines J, K, L, M and N. The Caltrans-Southern Pacific Commuter Rail Service (Caltrain) terminal at Fourth and Townsend Sts. is accessible from the project site by Muni feeder bus service. All of the regional transit systems currently operate close to or above recommended capacity during peak commute periods.

There is little existing pedestrian activity on the sidewalks around the project site. Most pedestrians in the project area during peak hours are people who work in the Hills



FIGURE 17
MUNI AND BART ROUTES
IN THE PROJECT VICINITY

SOURCE: MUNI San Francisco Street & Transit Map, June 1984

building, walking to and from parking locations adjacent to the building. The existing office and industrial uses at the site are estimated to generate approximately 100 pedestrian pte during the a.m. and p.m. 15-minute periods, and 150 pedestrian pte during the midday 15-minute period. Existing pedestrian flow conditions may be described as open./5/

The Harrison St. sidewalk on the south side of the landmark building is approximately eight ft. wide. Poles and trees reduce the effective width to three ft. The Spear St. and Steuart St. sidewalks on the east and west sides of the site are both 14 ft., with effective widths of nine ft. due to utility poles. The Folsom St. sidewalk on the north side of the site is ten ft. in total width and five ft. in effective width due to poles.

Within the local area of the project site (generally bounded by Mission St., The Embarcadero, Bryant St., and Fremont St.; see Figure 14, p. 46), there are about 1,340 off-street parking spaces which are approximately 80% occupied/6/, not including spaces on blocks within the local area on which new projects have either been proposed or approved for construction./7/ Construction of these new projects would decrease the current off-street parking supply unless parking spaces are supplied as part of these new projects. Currently, there are 51 off-street spaces on the site in the Soco Building parking lot and four spaces along the south side of the Annex building. These spaces, which average about 85% occupancy, would be removed as part of the proposed project.

Within the local area of the project site, there are approximately 910 on-street parking spaces which are about 95% occupied./8/ Some on-street spaces have been temporarily removed by current construction projects in the area; future construction projects also would temporarily remove some on-street parking. To the west and to the south of the project site, most on-street parking spaces are uncontrolled.

Existing loading operations at the site currently take place at raised loading bays flush with the exterior of the building on the Spear St. and Steuart St. frontages of the landmark building. The loading bays on Spear St. are served by trucks backing over the sidewalk. The Steuart St. loading bays were originally designed to serve railcars using the spur track on Steuart St. Trucks access the Steuart St. loading bays by backing over the sidewalk and the spur track. The curb space on Harrison St. is currently designated for two-hour parking with the exception of a one-vehicle passenger loading zone directly opposite the existing entrance.

NOTES - Transportation, Circulation and Parking

/1/ San Francisco Department of City Planning, Transportation, an Element of the Master Plan, January 1983.

/2/ California Department of Transportation, I-280 Transfer Concept Program, Working Paper: Subtask 2.2.2, January 28, 1983.

/3/ San Francisco Department of City Planning, Rincon Hill Plan - A Proposal for Citizen Review, June 1984. San Francisco Department of City Planning, Draft EIR for the Rincon Hill Plan, 82.39E, June 24, 1984. These documents are on file with and available for public review at the Department of City Planning, 450 McAllister St., Fifth Floor, San Francisco, CA.

/4/ Anthony Bruzzone, Planner, San Francisco Municipal Railway, meeting, July 11, 1984.

/5/ Pushkarev, Boris and Jeffrey Zupan, Urban Space for Pedestrians, MIT Press, 1975.

/6/ C-3 District Parking Summary, City of San Francisco, 1982. South of Market Parking Inventory, City of San Francisco Department of City Planning, November/December 1981, updated by DKS Associates, field survey, May 1984.

/7/ City of San Francisco Department of City Planning, Cumulative List of Projects in Downtown San Francisco, March 10, 1984; see Appendix C, pp. A-36 to A-39.

/8/ Environmental Science Associates field surveys, 1981, updated by DKS Associates field survey, May 1984.

F. AIR QUALITY

The Bay Area Air Quality Management District (BAAQMD) operates a regional monitoring network which measures the ambient concentrations of six air pollutants: ozone (O₃), carbon monoxide (CO), total suspended particulates (TSP), lead (Pb), nitrogen dioxide (NO₂), and sulfur dioxide (SO₂). On the basis of the monitoring data, the Bay Area, including San Francisco, currently is designated a non-attainment area with respect to the federal ozone and CO standards. A three-year summary of the data collected at the BAAQMD monitoring station nearest the project site (about 2.4 miles south at 900 23rd St.) is shown in Appendix E p. A-52, together with the corresponding federal and/or state ambient air quality standards. In 1983, there was one violation of the federal and state one-hour average ozone standards and four violations of the state 24-hour average TSP standard; in 1982 there was one violation of the federal and state eight-hour standard, and three violations of the state 24-hour average TSP standard; and in 1981 there was one violation of the state 24-hour average TSP standard.

A CO "hotspot" monitoring program was conducted during the winter of 1980-81 at the intersection of Geary and Taylor Sts., about 1.2 miles west of the site./1/ The observed high eight-hour average concentration was 11.5 ppm, which violates the 9-ppm state and federal standard by 2.5 ppm. The high one-hour average concentration of 15 ppm does not violate the 20-ppm state standard or the 35-ppm federal standard. Another CO hotspot monitoring program was conducted during the winter of 1979-80 at the intersection of Washington and Battery Sts., about 0.8 miles northwest of the site. The high eight-hour average concentration was 10.1 ppm, which violates the standard by 1.1 ppm. The high one-hour average concentration of 15 ppm does not violate the standards. These data indicate that locations in San Francisco near streets with high traffic volumes and congested traffic flows may experience violations of the eight-hour CO standard during adverse meteorological conditions.

Near the site, however, CO concentrations generally are lower. A third CO hotspot monitoring program was conducted during the winter of 1980-81 at 100 Harrison St., across Spear St. from the project site. The high eight-hour and one-hour average concentrations were 7.8 ppm and 13 ppm, respectively, which do not violate the standards.

Comparisons of these data with those from other BAAQMD monitoring stations indicate that San Francisco's air quality is among the least degraded of all the developed portions of the Bay Area. Two of the three prevailing winds, westerly and northwesterly, blowing off the Pacific Ocean reduce the potential for San Francisco to receive pollutants from elsewhere in the region.

San Francisco's air quality problems, primarily CO and TSP, are due largely to pollutant emissions from within the City. CO is a non-reactive pollutant with one major source category, motor vehicles. Ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic. TSP levels are relatively low near the coast, increase with distance inland, and peak in dry, sheltered valleys. The primary sources of TSP in San Francisco are demolition and construction activities, and motor vehicle travel over paved roads.

San Francisco contributes to air quality problems, primarily ozone, which is a regional problem, in other parts of the Bay Area. Ozone is not emitted directly, but is produced in the atmosphere over time and distance through a complex series of photochemical

reactions involving emitted hydrocarbons (HC) and nitrogen oxides (NO_x), which are carried downwind as the photochemical reaction occurs. Ozone standards are exceeded most often in the Santa Clara, Livermore, and Diablo Valleys, because local topography and meteorological conditions favor the buildup of ozone and its precursors there.

In 1979, emissions from motor vehicles were the source of 94% of the CO, 36% of the (HC) 7% of the TSP, and 44% of the nitrogen oxides (NO_x) in San Francisco, while power plant fuel combustion was the largest single source of sulfur oxides, about 33% of the total. These percentages are expected to apply reasonably well to current conditions./2/

In response to the Bay Area's ozone and CO nonattainment designations, ABAG, BAAQMD, and the Metropolitan Transportation Commission (MTC) prepared and adopted the 1982 Bay Area Air Quality Plan, which establishes pollution control strategies to attain the federal ozone and CO standards by 1987 as required by federal law./3/ These strategies were developed on the basis of detailed subregional emission inventories and projections, and mathematical models of pollutant behavior, and consist of stationary and mobile source emission controls and transportation improvements. The BAAQMD, MTC, and California Bureau of Automotive Repair have primary responsibility for implementation of these strategies.

NOTES - Air Quality

/1/ Association of Bay Area Governments, AQMP Tech Memo 40, "Results of the 1980/1981 Hotspot Monitoring Program for Carbon Monoxide," Berkeley, California, January 1982.

/2/ Bay Area Air Quality Management District (BAAQMD), Base Year 1979 Emissions Inventory, Summary Report (Revised), San Francisco, California, July 1, 1982.

/3/ Association of Bay Area Governments (ABAG), BAAQMD and MTC, 1982 Bay Air Quality Plan, Berkeley, California, December 1982.

G. EMPLOYMENT AND HOUSING FACTORS

ON-SITE EMPLOYMENT

About 330 persons are currently employed at the site by Hills, although the total number of employees varies with seasonal demand. Of the total employees, about 175 are office

workers, occupying 62,400 gross sq. ft. of office space, and 155 are coffee processing and warehouse workers, occupying about 241,400 gross sq. ft. of floor area, including 154,600 gross sq. ft. in the landmark building. The 155 coffee processing and warehouse workers are currently being relocated to the Hills Coffee plant at Arkansas and Mariposa Sts. in the City.

SAN FRANCISCO AND REGIONAL OFFICE MARKET

Commercial Space

The Department of City Planning has compiled data on major office building construction citywide since 1960. (See Table C-3 in Appendix C, p. A-40). According to the City's data, in 1983, there were about 64.3 million gross sq. ft. of space in major office buildings throughout the City. Most of this office space is in the C-3 District. Between 1960 and 1979, office space was built at an average rate of 1.4 million gross sq. ft. per year. Recently, office construction activity has risen to higher levels. The data compiled by the Department of City Planning show 12.2 million gross sq. ft. built from 1980 through 1983, for an average rate of about 3.0 million gross sq. ft. per year.

Downtown San Francisco is likely to continue to be the major office center in the Bay Area region. Forecasts of development between 1984 and 2000 prepared for the Downtown Plan EIR estimate that an additional 21.7 million gross sq. ft. of space in all uses would be built and occupied in the C-3 District. Most of this additional space (16.8 million gross sq. ft, almost 80% of the total) would be office space. According to the Downtown Plan forecasts, the rate of new office construction in the C-3 District would average about 1.1 million gross sq. ft. per year between 1984 and 2000./1/

The Department of City Planning maintains a list of cumulative office development in downtown San Francisco. (See Appendix C, pp. A-32 to A-39 and Tables C-1 and C-2, and text for a more detailed description of the contents of the list.) The list incorporates all office and major retail projects that are under formal review, approved but not yet under construction and under construction in the greater downtown area. This area covers the C-3 District in addition to adjacent areas, such as the Northern Waterfront, Civic Center, and the area south of Folsom St., which encompasses the project site. As of the March 10, 1984 list, about 9.2 million net new gross sq. ft. of commercial (office and retail space) were under formal review, about 5.0 million net new gross sq. ft. were

approved, and about 5.7 million net new gross sq. ft. were under construction. In total, the list includes a net addition of about 19.9 million commercial gross sq. ft.: 19.0 million gross sq. ft. of office space and 0.9 million gross sq. ft. of retail space. The information on the list for the net addition of space accounts for about 2.7 million gross sq. ft. of existing office and retail space that would be demolished for construction of these projects. About 13.2 million gross sq. ft. of the 19.9 million gross sq. ft. total are in projects located in the C-3 District./2/

Space in office buildings in the other eight counties of the nine-county Bay Area was estimated to be 27 million sq. ft. as of the end of 1979./3/ While San Francisco has the majority of existing office space in the region, the rapid growth of office functions in other Bay Area counties has resulted in less than half of the new space in office buildings in the region being built in San Francisco. Forty-five percent of the dollar value of building permits issued for office construction in the region between 1973 and 1979 was for San Francisco development./3/ Because the average cost per sq. ft. for office construction is higher in San Francisco due to the predominance of high-rise office construction, the City's recent share, in terms of square footage of regional office space construction, can be inferred to be less than 45 percent.

San Francisco's role as a headquarters city and one of the major business centers for the West Coast stimulates office growth elsewhere in the Bay Area. As San Francisco firms expand, they look to suburban office markets to accommodate new functions and/or to attract a certain segment of the labor force. Moreover, as the costs of space in San Francisco have increased, due to high levels of demand, cost-sensitive firms have chosen locations in other cities or in expanding suburban locations.

Vacancy Rates

On the basis of a 1984 citywide survey of 315 office buildings, the San Francisco Building Owners and Managers Association (BOMA) reported a citywide vacancy rate of 6.8%./7/ This rate is a decrease from the 7.7% rate reported by BOMA in its 1983 survey, and an increase over the 3.69% rate reported in its 1982 survey and the 1.04% rate reported in its 1981 survey. According to a June 1984 Coldwell Banker survey, the vacancy rate in downtown San Francisco office buildings (new, existing and major renovations and including the South of Market area) was 8.6%./8/ The 8.6% rate is an increase from 0.1%

during June 1981 and 6.1% during June 1983 (earlier Coldwell Banker surveys). The vacancy rate for June 1984 is the highest that has been reported for San Francisco since Coldwell Banker started this survey in 1978. The current 8.6% vacancy rate is the fourth lowest of the 33 major financial districts surveyed by Coldwell Banker. For comparison, as of June 1984 the office vacancy rate was 13.5% nationally; 10.8% in Chicago; 6.5% in downtown Manhattan; 16.2% in Dallas; and 9.1% in San Jose./8/

The surveys indicate a general trend of increasing vacancy rates for downtown San Francisco office buildings over the last three years. This increase is the result of several factors, including an increase in the amount of available office space (new space being completed and space available for sublease), and a decrease in the growth rate of demand for office space due to the nationwide economic recession over the last several years. Space nearing completion in new buildings may result in higher vacancy rates than existed in the late 1970s and early 1980s. However, according to Coldwell Banker, "Demand for prime office space in San Francisco's financial district remains strong as evidenced by healthy levels of preleasing activity in new buildings and a . . . vacancy rate considerably below the national average."/9/

Commercial Rents

As a result of the high demand in San Francisco and increasing operating costs, land prices, construction costs, and interest rates, annual rents for office space in the financial district north of Market St. tripled in the last decade, from \$8.50 per sq. ft. in 1970 to approximately \$30 per sq. ft. in 1981./10/ New buildings are able to charge the highest rents, while rents in older buildings in the financial district are much less expensive, averaging approximately \$15 per sq. ft. less than in new buildings./11/ High rent levels, especially in the financial district, have forced many smaller, more marginal firms with no need for location in the financial district core, to seek less expensive offices in South of Market. Headquarters firms have also "spun off" less critical space and labor intensive operations to less expensive locations South of Market./12/

The rents for new office space in San Francisco (\$25 to \$42 per sq. ft.) are about 40% to 55% higher than commercial rents in Oakland (\$18 to \$27 per sq. ft.); the Peninsula (\$18 to \$24 per sq. ft.); and Contra Costa County (\$16 to \$27 per sq. ft.)./13/ Higher vacancy rates would be expected to decrease the pressure for higher commercial office rents in

San Francisco. The rising vacancy rates discussed on p. 67 have been (and could continue to be) beneficial to lessees of office space by both lowering rents and increasing business choice for size, layout and location of office space.

HOUSING

The housing stock in San Francisco and the surrounding region is characterized by a low rate of growth for new housing, a low vacancy rate for rental units, and high purchase prices and rental costs in relation to prevailing salaries. These factors, some of which would normally stimulate new housing construction, are in part the result of high interest rates and land costs which have constricted the supply and affordability of housing in the region.

San Francisco had about 316,600 occupied housing units, according to the 1980 U.S. Census; about two-thirds of the housing stock was rented and one-third was owner-occupied./14/ Housing units completed in 1982 totalled about 590 units; of these, about 170 units were developed through public action and about 420 units were developed by the private sector./15/ The average 1983 market value of a single-family house was about \$143,000 in the Bay Area and \$156,000 in San Francisco./16/ Census data for 1980 indicated a median rent in the City of \$267 and a vacancy rate of 4.2% for rental units./17/ The \$267 median rent in 1980 dollars is equivalent to a median rent of approximately \$345 in 1984 dollars./18/ Census data for rent include residential hotels and subsidized housing. A survey conducted by the Federal Home Loan Bank of San Francisco in September 1983 indicated a vacancy rate of 0.9% for multi-family units and 1.2% for single-family houses./19/ A vacancy rate of four to five percent indicates a competitive market; the very low rate in San Francisco means that people looking for housing are having difficulties finding new residences. This high demand for housing may also cause further price increases.

NOTES - Employment and Housing Factors

/1/ City and County of San Francisco, Downtown Plan EIR (EE81.3, certified October 18, 1984), pp. IV.B.17, IV.B.34-35, p. VII.B.4 and accompanying text; and p. VII.B.2 and accompanying text. These forecasts of development for the Downtown Plan fall near the lower end of the range identified for the five Alternatives to the proposed Plan. The total addition of space built and occupied between 1984 and 2000 would range from 21.3 million gross sq. ft. (Alternative 5) to 29.9 million gross sq. ft. (Alternative 2). In all Alternatives, office space would represent the largest component of development. The smallest increase in office space would occur under Alternative 4 (15.4 million gross sq. ft.), while the largest increase would occur under Alternative 1 (24.4 million gross

III. Environmental Setting

sq. ft.). Under Alternative 1, the rate of new office construction forecast between 1984 and 2000 would continue at the relatively high level of 1.7 million gross sq. ft. per year.

/2/ Department of City Planning, July 23, 1984, Montgomery-Washington Building Draft Supplemental EIR (81.104E).

/3/ Association of Bay Area Governments (ABAG), "Bay Area Office Growth", Berkeley, California, April, 1981, pp. 31-62. This number may be an underestimate because the sources for the report apparently do not always include small office buildings.

/4/ City of Oakland, Department of City Planning, "Major Buildings in the Central District," January 26, 1982.

/5/ "Proposed Specific Plan: Bayshore Office Park and Baylands Development Area, Brisbane, California," Blayney-Dyett, Urban and Regional Planners, July 1982, and Metropolitan Transportation Commission, "Travel Impacts of Proposed Development on the Peninsula Along Route 101," September 9, 1982.

/6/ People For Open Space, "Proposed East Bay Office/Industrial Development," October 1982.

/7/ Elmer Johnson, Building Owners and Managers Association, telephone conversations, December 22, 1982, June 12, 1984, and October 3, 1984.

/8/ Coldwell Banker, "Office Vacancy Index of the United States," June 30, 1984. San Francisco vacancy rates are determined as part of a national survey of 33 major financial districts conducted quarterly. A copy of the June 30, 1984 survey is on file and available for public review at the Department of City Planning, Office of Environmental Review, 450 McAllister Street, Fifth Floor.

/9/ Coldwell Banker, "Office Vacancy Index of the United States," June 30, 1983.

/10/ Department of City Planning Memorandum to the City Planning Commission, "South of Market Interim Controls," January 26, 1982.

/11/ James Hoagland, Leasing Broker, Cushman & Wakefield, telephone conversation, November 12, 1984.

/12/ San Francisco Planning and Urban Research Association, June 1981, South of Market: A Plan for San Francisco's Last Frontier.

/13/ Coldwell Banker, "The Commercial Real Estate Market in the San Francisco Bay Area," December 1982.

/14/ Association of Bay Area Governments (ABAG), "Census Data Bulletin No. 6," March 1982.

/15/ San Francisco Department of City Planning; Housing Information Series: Changes in the San Francisco Housing Inventory, 1981 and 1982; September 1983.

/16/ Real Estate Research Council of Northern California, Northern California Real Estate Report, Vol. 34, No. 3, and James Davis, Executive Director, Real Estate Research Council of Northern California, telephone conversation, February 24, 1984.

/17/ City Planning Information Services, "1980 Census Information," March 1982.

/18/ U.S. Bureau of Labor Statistics, "Consumer Price Index, All Items, San Francisco-Oakland," July 27, 1984.

/19/ Federal Home Loan Bank of San Francisco, "San Francisco County Housing Vacancy Survey," April 1984.

IV. ENVIRONMENTAL IMPACT

INTRODUCTION

An application for environmental evaluation of the project was filed on February 27, 1984. On June 1, 1984, based on an Initial Study, the Department of City Planning, Office of Environmental Review determined that an Environmental Impact Report was required. Issues determined as a result of the Initial Study to require no further discussion include: Reflected Light and Glare, Employment and Housing Displacement, Construction and Operational Noise, Air Quality during Construction, Wind Effects, Utilities/Public Service (except for cumulative fire protection services), Biology, Geology/Topography, Water, and Hazards. Therefore, this document does not discuss these issues (see Appendix A, pp. A-2 to A-29, for the Initial Study).

Because of the project's mix of uses and its location on the border of two proposed planning areas, each with its distinct goals, uses and characteristics (the Downtown Plan and Rincon Hill Plan), the project's effects on traffic circulation, trip generation, office space demand, employment, housing demand and growth inducement would occur in both planning areas. Accordingly, in analyzing the potential environmental effects of the project, this EIR has drawn upon methodologies and analyses from both the Downtown Plan EIR and the Rincon Hill Plan Draft EIR to the extent that information contained in these reports is appropriate.

Some of the impacts presented in this section are not physical environmental effects as defined by the California Environmental Quality Act. They are included in the EIR for informational purposes only.

A. LAND USE AND ZONING

LAND USE

The major land-use change resulting from the project would be the addition of office space, introduction of new residential, retail and open space uses, and removal of

industrial space at the Hills Plaza block. The proposed project, although 122,375 gross sq. ft. less than allowable floor area, would be a more-intense land use than currently exists at the site (see Zoning discussion, below). Total net new floor area on the site would be 590,200 gross sq. ft., including parking area. Net changes in floor area by use on the site would be an increase of 524,600 gross sq. ft. of office; a decrease of 274,400 sq. ft. of coffee manufacturing space; and an addition of 100,000 gross sq. ft. of residential space, 40,000 gross sq. ft. of retail space, 167,000 gross sq. ft. of basement parking, and 38,000 gross sq. ft. of public open space; and 17,000 gross sq. ft. of common residential open space (see p. 20 and Table 2, p. 35).

The project would continue the recent trend of diversification of land uses from light industrial to office, retail, and residential uses South of Market. The project would be the first major mixed use development in the South of Market to be located south of Folsom St. and within the Rincon Hill Plan area. The project's expansion of commercial use farther South of Market would not be entirely a spill over of development from the downtown. The project also would be in response to development opportunities presented by the proposed Rincon Hill Plan and the underuse of the Hills' site as a result of its current relocation of coffee manufacturing uses.

The shift to mixed-use development and land use diversification in the Rincon Hill Area has been foreseen and is encouraged in the Northeastern Waterfront and Residence Elements of the San Francisco Comprehensive Plan and in the proposed Rincon Hill Plan.

ZONING

Existing City Planning Code

The project would be in an M-1 (Light Industrial) district. The residential tower would require Conditional Use authorization for housing in this district. The basic allowable floor area ratio (FAR) in an M-1 district is 5:1, permitting development of 756,250 gross sq. ft. of floor area at the site. The overall project would have a gross floor area, as defined by the City Planning Code, of about 727,000 gross sq. ft. With the use of corner (15,625 sq. ft.) and through-lot (3,000 sq. ft.) premiums, the maximum allowable floor area at the site would be 849,375 gross sq. ft. (122,375 gross sq. ft. more than the floor area proposed). See Note /3/ on p. 38 for calculations of FAR and premiums.

The project would be in a 105-F Height and Bulk district, in which the maximum allowable height is 105 ft. The proposed 200-ft. residential tower would exceed the maximum permissible height by 95 ft. and thus would require a height reclassification.

In the 105-F district, the maximum building length and diagonal dimensions above 80 ft. are 110 ft. and 140 ft., respectively. The proposed 84-ft. base, scaled to match the height of the landmark building, would be four ft. taller than the height above which bulk limits apply. Above 80 ft., the base of the new construction would exceed the maximum length by 210 ft. on the Spear St. frontage and 165 ft. on the Folsom St. frontage. The residential tower would exceed the maximum length by about 45 ft. at floors seven through ten. The base would exceed the maximum diagonal dimension by 260 ft. and the eleven-story residential tower would exceed the diagonal dimension at the seventh through tenth floor levels by a maximum of 30 ft. (See Table 2, p. 35.) Exceptions to bulk requirements are allowed by the City Planning Code (Section 271) through Conditional Use authorization.

The three mechanical penthouses of the new construction would exceed the 16 ft. limit specified by Section 260(b) 1(a) of the City Planning Code. The 49-ft.-tall mechanical penthouse mid-block on Spear St. would exceed the 16 ft. limit by 33 ft.; the 19-ft.-tall penthouse setback from Steuart St. by three ft.; and the 26-ft.-tall penthouse atop the residential tower by ten ft. Height reclassification would be required to permit construction of the mechanical penthouses at the heights proposed.

It has not been determined by the Department of City Planning and the sponsor if application for a single height reclassification or several reclassifications would be requested to accommodate the residential tower and mechanical penthouses.

Under the existing City Planning Code, the project sponsor intends to apply for a Conditional Use (CU) authorization for consideration of the project as a Planned Unit Development (Sections 303 and 304 of the City Planning Code) with exceptions to bulk limits; for construction of a residential use in an M-1 district; and for a parking deficit of about 565 spaces (see pp. 127-130 for parking discussion).

To be developed as a PUD, the project must meet the criteria of Section 304 of the existing City Planning Code, which are summarized on p. 50 and listed in Appendix F,

p. A-54./1/ The 3.5-acre project site would meet the PUD criteria of a minimum 1/2 acre parcel in single ownership; the Department of City Planning has not yet determined if the project would meet other criteria concerning promotion of policies and objectives of the Master Plan's, provision of open space, and contribution of an outstanding design and of public benefit.

Rincon Hill Plan

A detailed discussion of the project's compliance to the proposed Rincon Hill Plan, is in Chapter IX, A. Rincon Hill Plan Alternative, pp. 184-194 and Table 18, pp. 187-188. If the proposed Rincon Hill Plan and its implementing ordinances are approved prior to project approval, the project, due to the floor area proposed, would require Conditional Use authorization per Section 245.2 of the proposed Rincon Hill Plan implementing ordinances (see also discussion on pp. 37 and 47 concerning the Rincon Hill Plan). Depending on the adopted requirements for mechanical penthouses, the project could require height reclassifications for the mechanical penthouses.

COMPREHENSIVE PLAN

Land uses of the proposed project would be governed by the following Elements of the San Francisco Comprehensive Plan:

Commerce and Industry Element

Objective 3, Policy 1 is to "promote the attraction, retention and expansion of commercial and industrial firms which provide employment improvement opportunities for unskilled and semi-skilled workers." The project would respond to this goal by providing clerical, janitorial, retail and construction jobs. The project would not displace or decrease blue collar jobs, as existing coffee manufacturing jobs are currently being relocated to another Hills plant in the City. The overall employment generated by the project is found on Section IV.I. Employment and Housing Factors, pp. 152-153. The project is intended to respond to Policy 2 of Objective 4, which is to maintain and enhance a favorable business climate in the City. It would respond to Objective 2, Policy 1, "retain existing commercial and industrial activity and to attract new such activity to the city" and to Objective 6, which seeks to "maintain and improve San Francisco's position as a prime location for financial, administrative, corporate, and professional activity" by maintaining Hills headquarters offices at the site.

Recreation and Open Space Element

The project's proposed mid-block plaza and pedestrian arcades would respond to the "San Francisco Shoreline Objective", which aims to "develop open spaces and recreation facilities which complement the urban character of the northern waterfront and bay shoreline." It also would address Policy 1 of that Objective, which requires all new development within the shoreline zone to "conform with shoreline land use provisions, to incorporate open space, to improve access to the water, and to meet urban design policies."

Residence Element

The Residence Element identifies Rincon Hill as an area for mixed residential and commercial development. As a major commercial/residential development proposed for the Rincon Hill area, the Hills Plaza project would be responsive to the Residence Element. The project's proposed 85 housing units would partly address Objective 1 of this Element, which seeks to "provide new housing for all income groups in appropriate locations" (see discussion of Objective 5 below). The project's proposed conversion of existing coffee manufacturing space to residential use on the site would respond to Policy 2 of this Objective, which aims to "facilitate the conversion of underused industrial and commercial areas to residential use." The project would be responsive to Objective 2, Policy 2 which seeks to "encourage higher residential density areas adjacent to downtown and in neighborhood commercial districts where higher density will not have harmful effects." The project would not be responsive to Objective 5 which is "to provide housing affordable by all income groups, particularly low and moderate income households," as no below-market-rate housing would be included in the project.

Northeastern Waterfront Element

This element outlines a series of objectives and policies designed to "contribute to the waterfront's environmental quality, enhance the economic vitality of the Port and the City, preserve the unique maritime character, and provide for the maximum feasible visual and physical access to and along the Bay." For the South of the Ferry Building Subarea, which includes the project site, the element proposes creation of a mixed-use activity center between Howard and Harrison Sts., comprised of a waterfront park, restaurants, and a hotel inland of the park. The element further calls for retaining "Hills Bros. Coffee facility in its current use as long as possible and accommodating its needs for truck access and parking."

The project's proposed conversion of presently underused light industrial space to an integrated, mixed-use development near the waterfront would generally be responsive to the Northeastern Waterfront Element. The mixed-use and open-space elements of the project would comply with Land Use Objective 2, which aims to "diversify uses in the northeastern waterfront to expand the period of use of each sub-area and to promote maximum public use of the waterfront while enhancing its environmental quality." The proposed housing included in the project would correspond to the Residential Objective, which seeks to "develop and maintain residential uses along the northeastern waterfront in order to assist in satisfying the City's housing needs and capitalize on the area's potential as a desirable living environment."

The relationship of the project to the urban design guidelines set forth in the Urban Design element is discussed in Section B of the Chapter, Architectural Resources, Urban Design, and Visual Quality, pp. 77-84, below. The project's compliance to the Transportation and Energy Elements is discussed on pp. 103, 106, and 130-131; and p. 149, respectively.

Rincon Hill Plan

For the project site, the Rincon Hill Plan would allow development of office, retail and residential uses as proposed in the project. The Rincon Hill Plan also calls for preservation of the Two Harrison landmark building; the creation of a mid-block plaza on the project block with retail uses on each side of the plaza, on the ground floors of the new construction and landmark building; and the provision of publicly accessible and common residential open space.

NOTE - Land Use and Zoning

/1/ Amendments to Section 304 are currently being considered by the Planning, Housing and Development Committee of the Board of Supervisors (File No. 93-82-C). Those amendments would permit a PUD designation for residential developments only; commercial development, such as the office/retail component of the project, would be excluded.

B. ARCHITECTURAL RESOURCES, URBAN DESIGN AND VISUAL QUALITY

The project would rehabilitate and convert the Two Harrison Building, a City landmark, into all office use. Exterior modifications to the landmark would be subject to Article 10

of the existing Planning Code which requires approval of a Certificate of Appropriateness by the City Planning Commission upon recommendation by the Landmarks Preservation Advisory Board (see pp. 32-33 for a description of proposed alterations).

The Urban Design Element of the San Francisco Comprehensive Plan contains policies and principles which may be used to evaluate the project. The Relationship Between Applicable Urban Design Policies of the Comprehensive Plan and the Proposed Project, Table 3, pp. 78-80, compares the project to these policies.

The basic design of the project follows guidelines recommended by the Department of City Planning for the Hills Plaza site.^{1/} Those guidelines recommend development of a plaza between the landmark building and new construction, a base separating vertical tower elements, and stepped residential tower at the northwestern corner of the site. The heights of the proposed buildings, along with the 162-ft. landmark tower, are intended to provide a transition from the existing 240-ft. height limit across Folsom (200 ft. proposed in the Downtown Plan; see Figures 18A-18C, pp. 81-83). The base is intended to reduce the massing of the project by separating the vertical elements of the residential tower and Spear and Stuart St. mechanical penthouses over the roof of the base.

The 200-ft. residential tower would be built on the far northwestern corner of the site to emphasize the landmark building tower and to minimize shading of the shoreline promenade (see IV. C. Shadows, pp. 84-97). The parapet line of the base would be scaled to continue the cornice height of the landmark building.

The proposed horizontal building massing of the base would be similar to that of several buildings in the direct project vicinity, such as the Hathaway and Joseph Magnin's Warehouses south and southwest of the project site, and the presently vacant federal office building west of the site.

By providing public access and a visual opening through the project block, the mid-block plaza would create new pedestrian views of the landmark tower; currently, only the upper portion of the tower can be viewed at street level. The mid-block plaza also would provide sufficient separation such that the architecture of the landmark building would remain distinct from the new construction.

TABLE 3: RELATIONSHIP BETWEEN APPLICABLE URBAN DESIGN POLICIES OF THE COMPREHENSIVE PLAN AND THE PROPOSED HILLS PLAZA PROJECT

APPLICABLE URBAN DESIGN POLICIES

A. Policies for Conservation

- | | |
|---|---|
| <p>1. Policy 7. "Recognize and protect outstanding and unique areas that contribute in an extraordinary degree to San Francisco's visual form and character." (p. 25)</p> | <p>Preservation of the landmark building and the 84-ft. height of the new base would help protect the visual scale of the Joseph Magnin Warehouse, opposite the landmark building on Harrison St., and of the Hathaway Warehouse, located diagonally from the landmark building. The landmark building and these warehouses help retain the low-scaled industrial character, representative of the Rincon Hill area after the turn of the century.</p> |
| <p>2. Policy 4. "Preserve notable landmarks and areas of historic, architectural or aesthetic value, and promote the preservation of other buildings and features that provide continuity with past development." (p. 25)</p> | <p>The project would preserve the landmark building and tower and convert it into all office space. The parapet of the base, 84 ft. in height, would continue the cornice line of the landmark building, also approximately 84 ft. in height. The separation (ranging from about 100 to 160 ft.) of the landmark building from the new construction by the mid-block plaza would provide sufficient visual separation to retain the architectural integrity of the landmark building. The mid-block plaza would create new public views of the landmark tower. Subject to approval by the Landmarks Preservation Advisory Board, the present architecture of the tower would be altered by the creation of round-headed open arches at the base of the tower for pedestrian access.</p> |

B. Policies for City Pattern

- | | |
|---|---|
| <p>3. Policy 1. "Recognize and protect major views in the City, with particular attention to those of open space and water." (p. 10)</p> | <p>The site is outside major designated view corridors along Pine St. and California St. The project would eliminate some views from the northwest of the Bay Bridge span. Street level views of The Embarcadero and waterfront from the west and south would not be reduced, as these street-level views are already blocked by existing structures on-site. The location of the residential tower would provide a visual transition in height from the southern edge of the Downtown office district while still protecting views of the Bay. See also Item 4, below.</p> |
| <p>4. Policy 3. "Recognize that buildings, when seen together, produce a total effect that characterizes the City and its districts." (p. 10)</p> | <p>The landmark tower and residential tower, along with the Sailor's Union of the Pacific building and Union 76 tower would provide a visual focus to the Rincon Hill area. With the exception of the proposed residential tower and these existing towers, structures in the Rincon Hill area would continue to be generally low-rise. However, the height reclassifications proposed in the Rincon Hill</p> |

TABLE 3: RELATIONSHIP BETWEEN APPLICABLE URBAN DESIGN POLICIES OF THE COMPREHENSIVE PLAN AND THE PROPOSED HILLS PLAZA PROJECT (Continued)

APPLICABLE URBAN DESIGN POLICIES

B. Policies for City Pattern (Cont.)

- | | |
|--|---|
| 4. Policy 3. (Continued) | Plan would raise the existing 105 ft. height limit of the area to heights ranging from 360 to 400 ft. near the top of Rincon Hill to 84 and 200 ft. at locations extending east towards the Bay. |
| 5. Policy 6. "Make centers of activity more prominent through design of street features and by other means." (p. 12) | As a major mixed-use development South of Market and in the Rincon Hill area, the project would provide an activity center for these areas and the general waterfront vicinity. The mid-block plaza, fanning out to The Embarcadero and accessible to the public, would encourage pedestrians to use this mid-block access and on-site retail uses. |

C. Policy for Major New Development

- | | |
|---|--|
| 6. Policy 1. "Promote harmony in the visual relationship and transitions between new and older buildings." (p. 36) | The pitched roofs and height transition of the residential tower and Steuart and Spear St. mechanical penthouses would reflect the vertical proportions and composition of the landmark tower. See also Items 1, 2 and 4. |
| 7. Policy 4. "Promote building forms that will respect and improve the integrity of open spaces and other public areas." (p. 36) | The project would increase shadows on the existing shoreline promenade in the late afternoon during spring, fall and winter months. The tallest element of the project, the residential tower, would be located at the far northeastern corner of the site, thereby minimizing shadowing of the shoreline promenade by the project during these periods. The project would provide new open space on-site and would increase pedestrian access to the shoreline, via the mid-block plaza and Steuart St. arcade. |
| 8. Policy 5. "Relate the height of buildings to important attributes of the city pattern and to the height and character of existing development." (p. 36) | The project itself would be taller in scale than the predominantly small-scale uses in the Rincon Hill area. Except for the heights of the mechanical penthouses, the 84, 105 and 200 ft. height would be generally consistent with those proposed for the site in the Rincon Hill Plan. The height of the residential tower would be similar to many of the high-rise buildings in the South of Market district, north of Folsom St. and in the Downtown office district. The project, located at the foot of Rincon Hill, would provide a height transition from the 360 to 400 ft. height limits proposed for the top of Rincon Hill in the Rincon Hill Plan. |
| 9. Policy 6. "Relate the bulk of buildings to the prevailing scale of development to avoid an overwhelming or dominating appearance in new construction." (p. 37) | The new construction would exceed existing bulk limits above 80 ft. The base of the new construction would be four ft. taller than the height above which bulk limits apply. The 84-ft. height is intended to mirror the |

TABLE 3: RELATIONSHIP BETWEEN APPLICABLE URBAN DESIGN POLICIES OF THE COMPREHENSIVE PLAN AND THE PROPOSED HILLS PLAZA PROJECT (Continued)

APPLICABLE URBAN DESIGN POLICIES

C. Policy for Major New Development

9. Policy 6. Continued

cornice line of the existing landmark building. The residential tower would exceed bulk limits to provide transitional steps toward the Bay. These steps are intended to prevent the building from appearing overwhelming in scale when viewed from the street. The heights and the new construction would be taller than the mixture of industrial buildings currently occupying the site, which range in height from 20 to 115 ft. The bulk of the project would be minimized by the distribution and vertical separation of the tower and penthouse elements over the roof of the building base.

D. Policies for Neighborhood Environment

10. Policy 4. "Design walkways and parking facilities to minimize danger to pedestrians. (p. 55)

A full security system would be provided in the project, including security stations, staffed with a 24-hour security force; closed-circuit television to monitor the entire site, and employee access controls (see II. Project Description, p. 31).

11. Policy 13. "Improve pedestrian areas by providing human scale and interest." (p. 57)

The project would provide 40,000 sq. ft. of retail space in an area currently not well provided with retail services. The pedestrian areas of the project would be the mid-block plaza, separate private open-air courtyards, and pedestrian arcades in the landmark building and new construction. The mid-block plaza would create a pedestrian link, accessible to the public, from Rincon Hill to The Embarcadero and the shoreline. The plaza would be shaded at all times of the year due, primarily, to the existing landmark building.

The blocks currently in the Rincon Hill area are quite large and do not accommodate a residential scale. If the Rincon Hill Plan is adopted, the mid-block would become part of a pedestrian network in Rincon Hill, intended to enhance the residential scale for pedestrians.

The base would be setback above about 60 ft. in height along a portion of Steuart St. to create a pedestrian-scale streetwall. Pedestrian areas also would be enhanced by the pedestrian arcades created in the new construction. These arcades would be enclosed by double-story round-headed, arched bays and rectangular bays. Pedestrian entrances to the plaza would be created through the free-standing bays of the landmark building.



FIGURE 18A
VIEW OF PROJECT FROM THE EMBARCADERO
(LOOKING SOUTH)

SOURCE: Whesler-Paul Architects



FIGURE 18B
VIEW OF PROJECT FROM FOLSOM STREET
(LOOKING EAST)

SOURCE: Whisler-Patri Architects

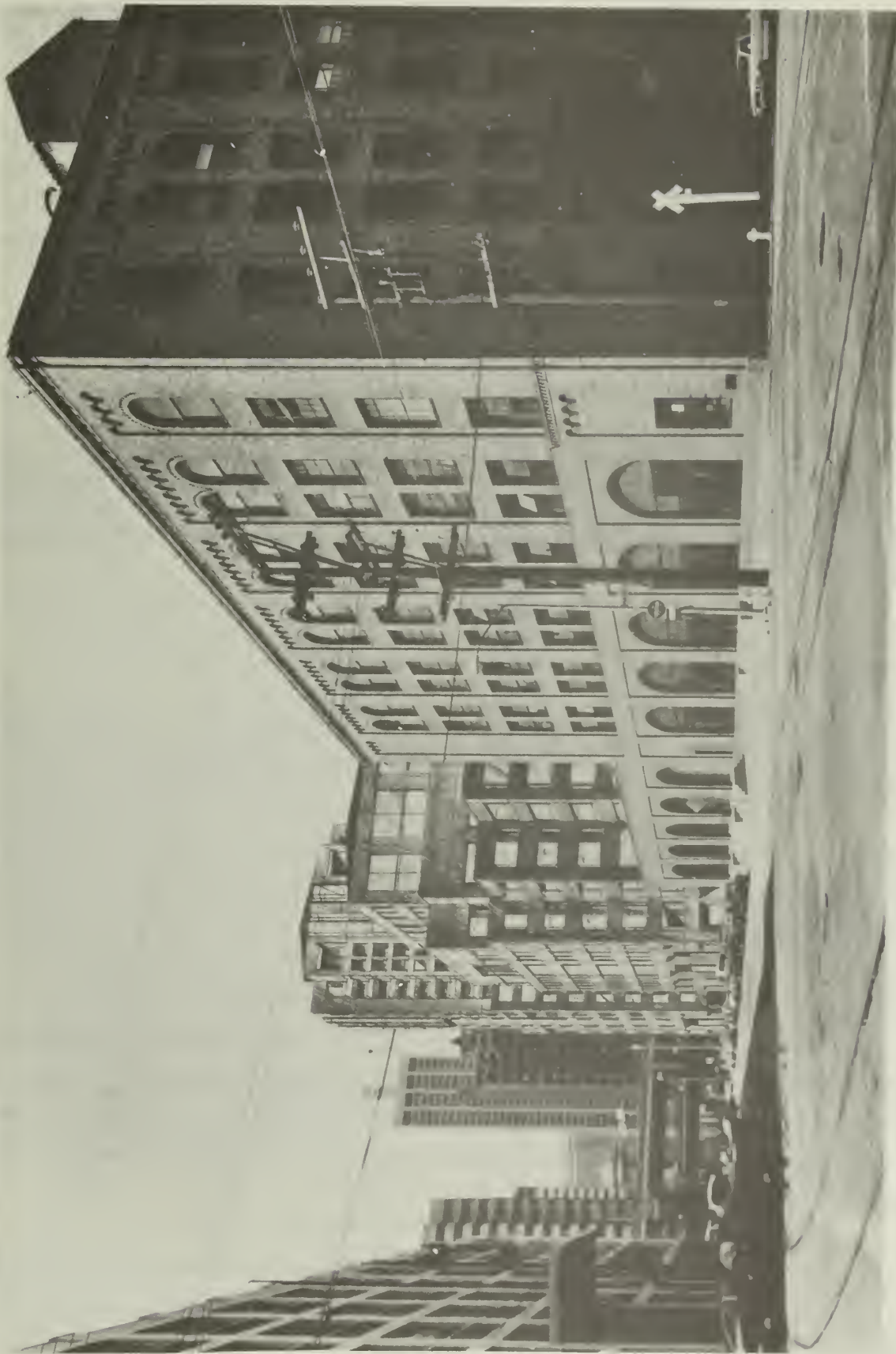


FIGURE 18C
VIEW OF PROJECT FROM SPEAR STREET
(LOOKING NORTH)

SOURCE: Whisler Pátri Architects

The project would be visible from the eastern approach of the San Francisco Bay Bridge. It would not block any views of the Bay Bridge or the Bay from points to the south. At street level from the northwest within one to two blocks of the site, the base and residential tower would reduce and eliminate some southeastern views of the Bay Bridge. However, existing long-range street level views of the Bridge and Yerba Buena Island to the east would remain unchanged. The 200-ft. residential tower would reduce some long-range views of the Bay Bridge and the Bay from the upper floors of high-rise buildings to the north and northwest. At close-range, the residential tower would be seen by motorists on the upper and lower decks of the Embarcadero Skyway, as well as motorists on the the Bay Bridge.

NOTE - Architectural Resources, Urban Design and Visual Quality

/1/ Dean Macris, Director of City Planning, letter to Norman E. Dean, Hills Bros. Coffee, Inc., November 15, 1983; this letter is on file and available for public review at the Department of City Planning, Office of Environmental Review, 450 McAllister St., 5th Floor, San Francisco.

C. SHADOWS

In the project vicinity, there is no existing property under the jurisdiction of the Recreation and Park Commission that would be affected by project shadows.

In response to the requirements of Proposition K, Figure 19, p. 85 presents property under the jurisdiction of the Recreation and Park Department that could be affected by project shadows (see pp. 54-55 for a discussion of Proposition K). Under Proposition K analysis, this figure also shows the maximum length of project shadow that would effect Recreation and Park Department property (occurring in December one hour after sunrise and one hour before sunset). Figure 19 considers shadows only from the residential tower (the tallest proposed structure), and does not consider existing shadows or shadows from intervening structures, both of which would reduce the length of project shadows shown. Therefore, Figure 19 shows worst-case shadows that could potentially affect Recreation and Park Commission property.

In addition to the Proposition K analysis, two other shadow analyses were conducted for the project: one showing project shadows cast off-site, and another showing project shadows cast on-site (within the project). Diagrams of shadows cast off-site were done

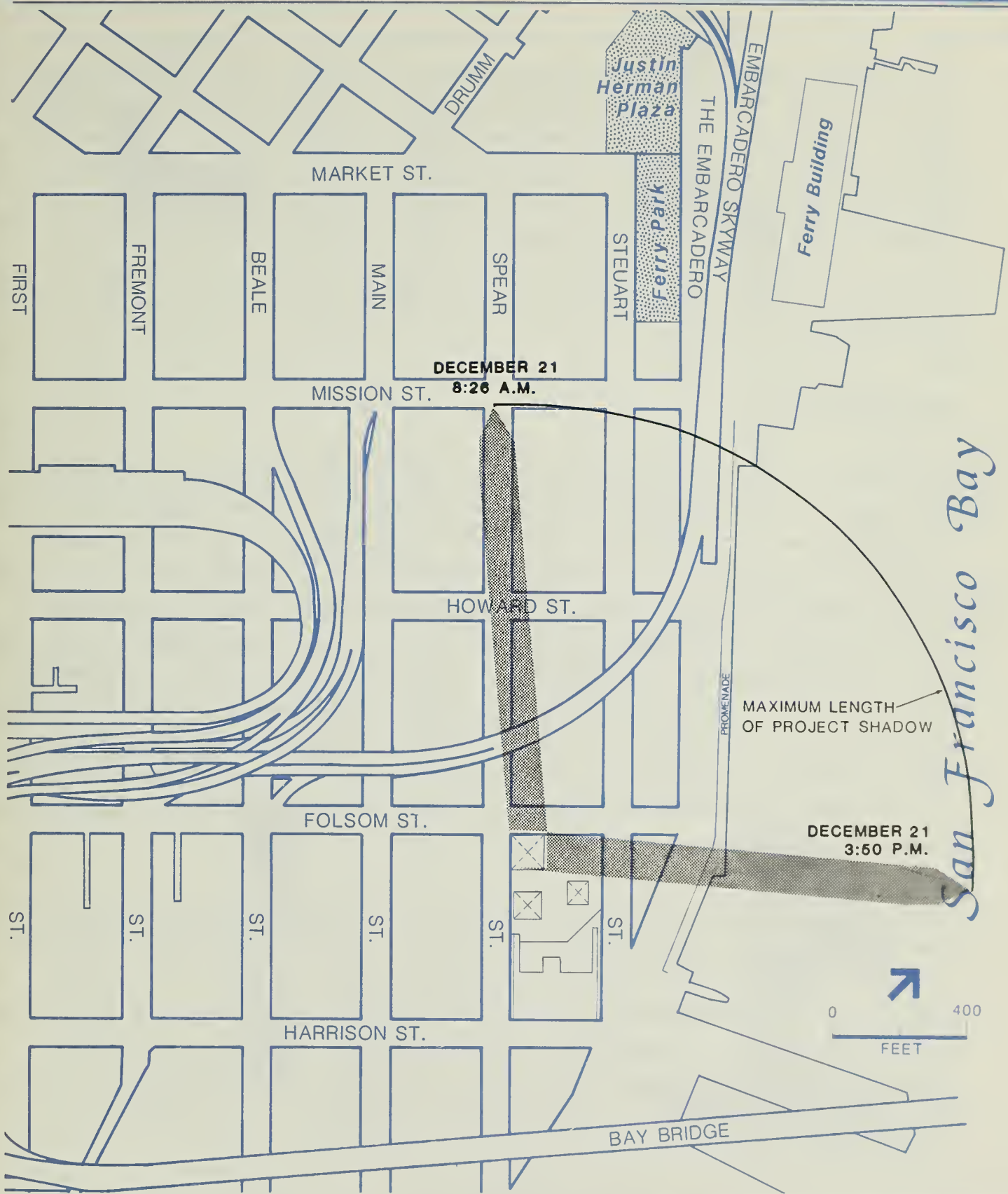


FIGURE 19
PROPOSITION K
SHADOW ANALYSIS

SOURCE: ESA AND SAN FRANCISCO DEPARTMENT OF CITY PLANNING

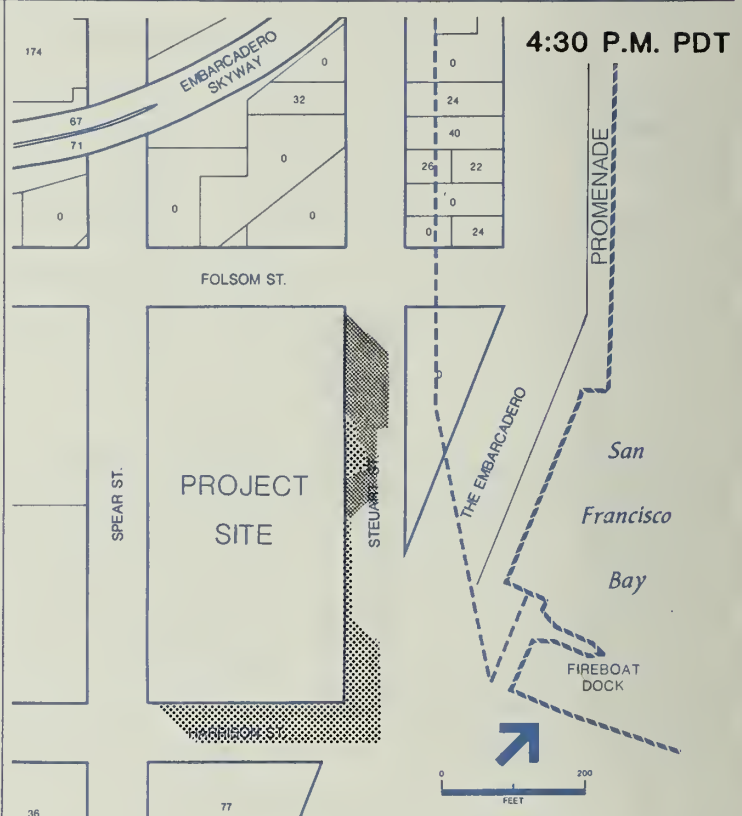
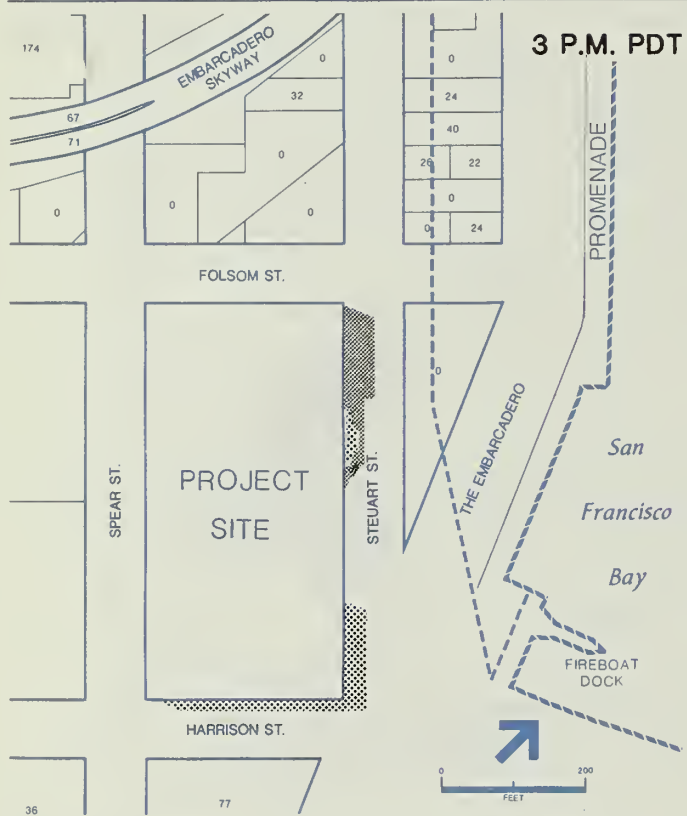
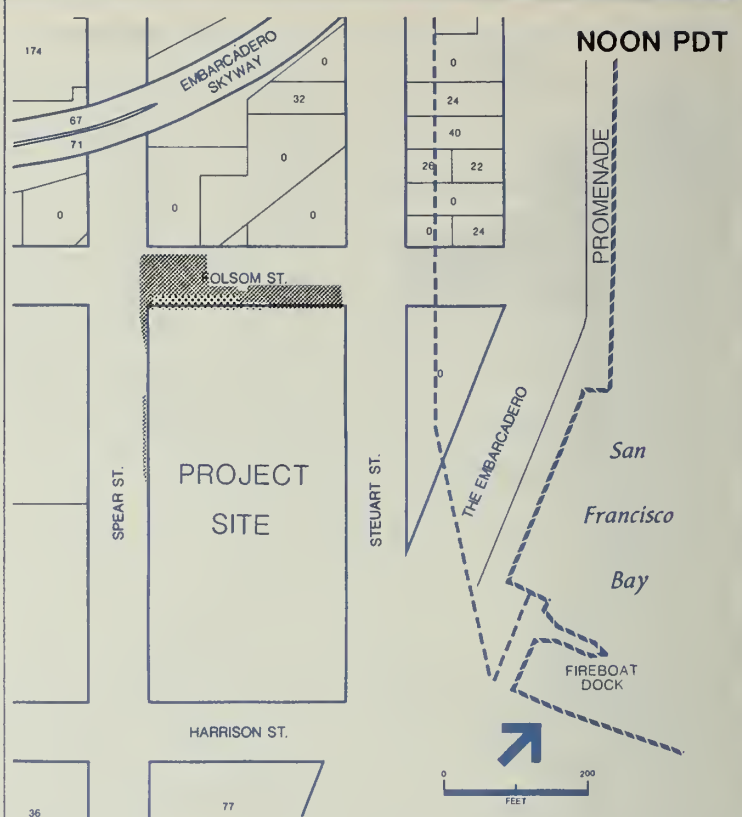
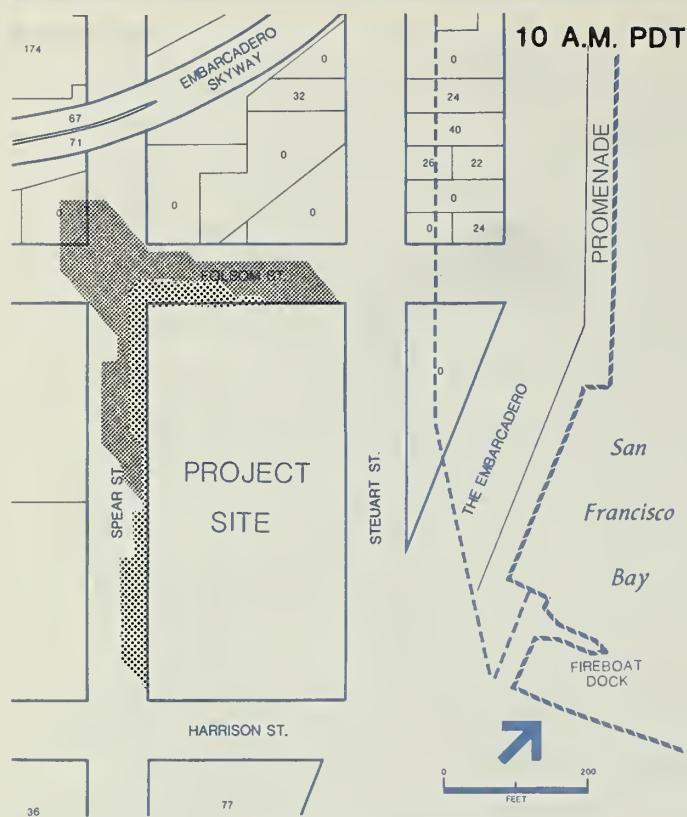
for 10:00 a.m., noon, 3:00 p.m. and 4:00 or 4:30 p.m. for March, June, September and December. These times were selected to represent times of heavy use of the surrounding streets, including The Embarcadero and shoreline promenade. The off-site shadow analysis considers the potential 4-1/2 acre waterfront park site proposed in the Rincon Point - South Beach Redevelopment Plan. The status of this potential open space and the project's shadow effect on it are discussed on pp. 91-92. Diagrams showing shadows cast on-site were done for March, June, September and December at noon and 3:00 p.m., as these times were representative of the maximum shadows cast on the proposed on-site open spaces.

Off-site Shadows

The analysis of net shadows cast off-site presents shadows cast by existing buildings and new shadows created by the new construction (net new or new refers to new project shadows that do not coincide with existing shadows). Shadows cast by the landmark building are included as part of the existing shadows. During different times and at various seasons, the project's new construction would create new shadow on the blocks located northeast and northwest of the project block, on a small corner portion of the block west of (diagonal to) the project block, on The Embarcadero (roadway), and on the shoreline promenade owned by the Port of San Francisco (Port). The shoreline promenade is located along the east side of The Embarcadero; it extends from the Ferry Building south to Harrison St. Throughout winter and spring, the project would affect portions of the promenade roughly between Folsom and Harrison Sts., about 25% of the 1,670-ft. length of the promenade.

March (PST). At 10:00 a.m. and noon, the new construction would create net new shadows on the block northwest of the project block. (See Figure 20A, p. 87.) Areas that would be in new shadow on this block are currently used as parking lots (see Figure 13, p. 45). At 3:00 p.m. the project shadow would advance northeast toward the Bay, and shade a portion of Steuart St. and the triangular block northeast of the site that is currently used for parking by Hills employees. By 4:30 p.m. the new construction would shade a portion of The Embarcadero roadway, and approximately 105 linear ft. of the 1,670-ft.-long shoreline promenade.

June (PDT). At 10:00 a.m., new shadows would be cast northwest on a parking lot diagonally across the Folsom and Spear Sts. intersection (see Figure 20B, p. 88). At noon,

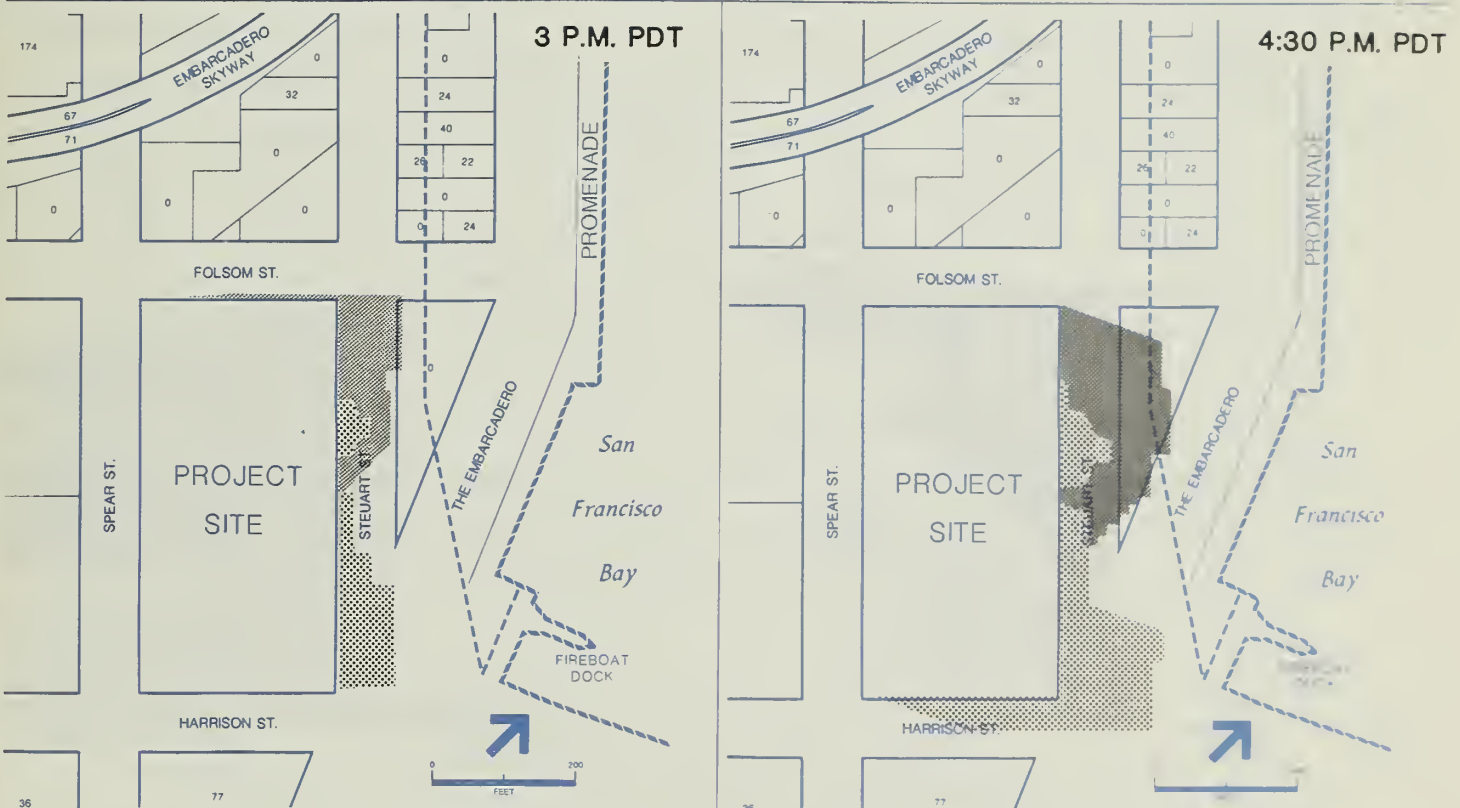
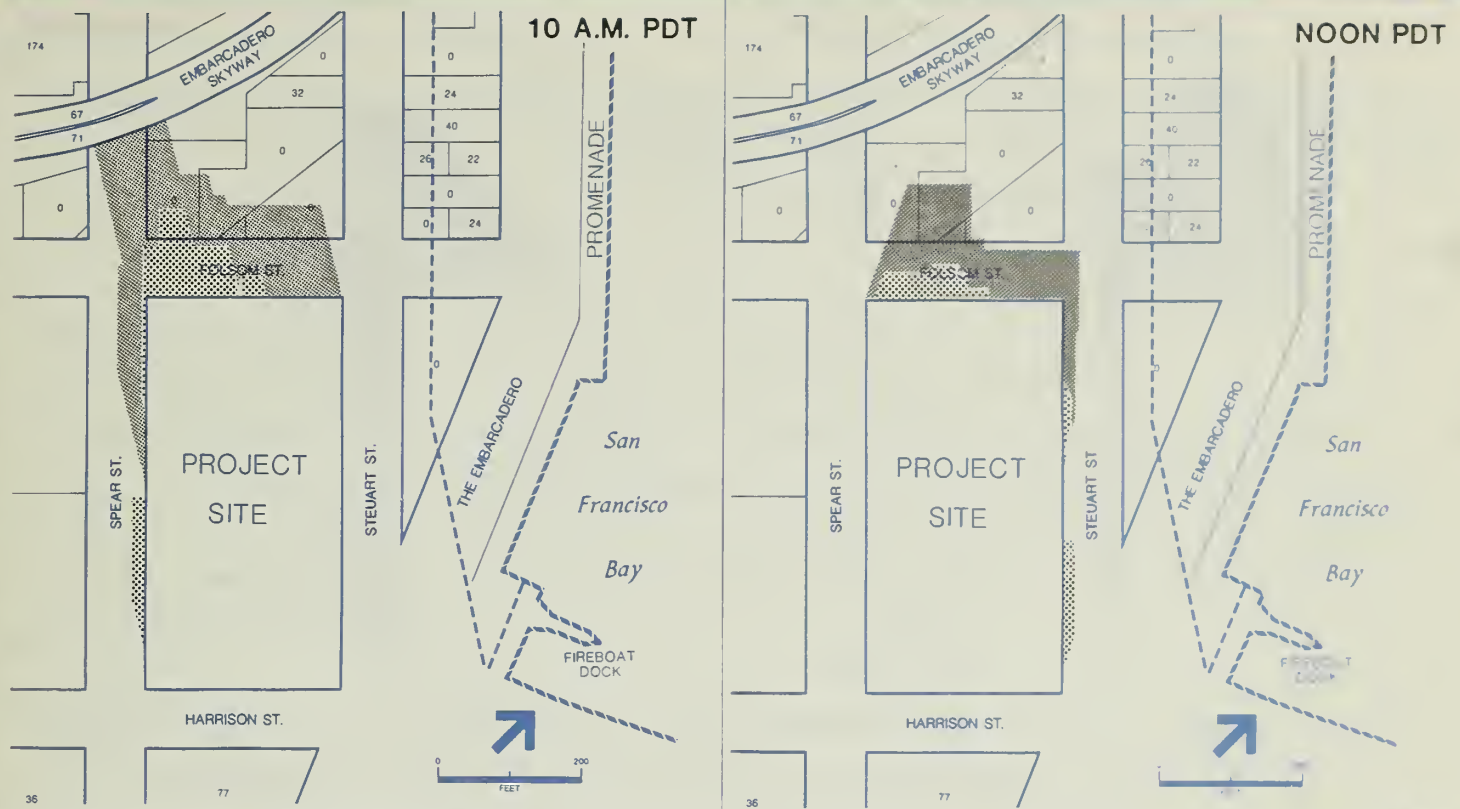


- Shadow from Existing Buildings (Includes Shadow from Landmark Bldg.)
- Net New Shadow from Proposed Project

----- Boundary of Potential Open Space in Rincon Point Redevelopment Area

FIGURE 20B
OFF-SITE SHADOWS
IN PROJECT VICINITY -
JUNE 21

SOURCE: ESA

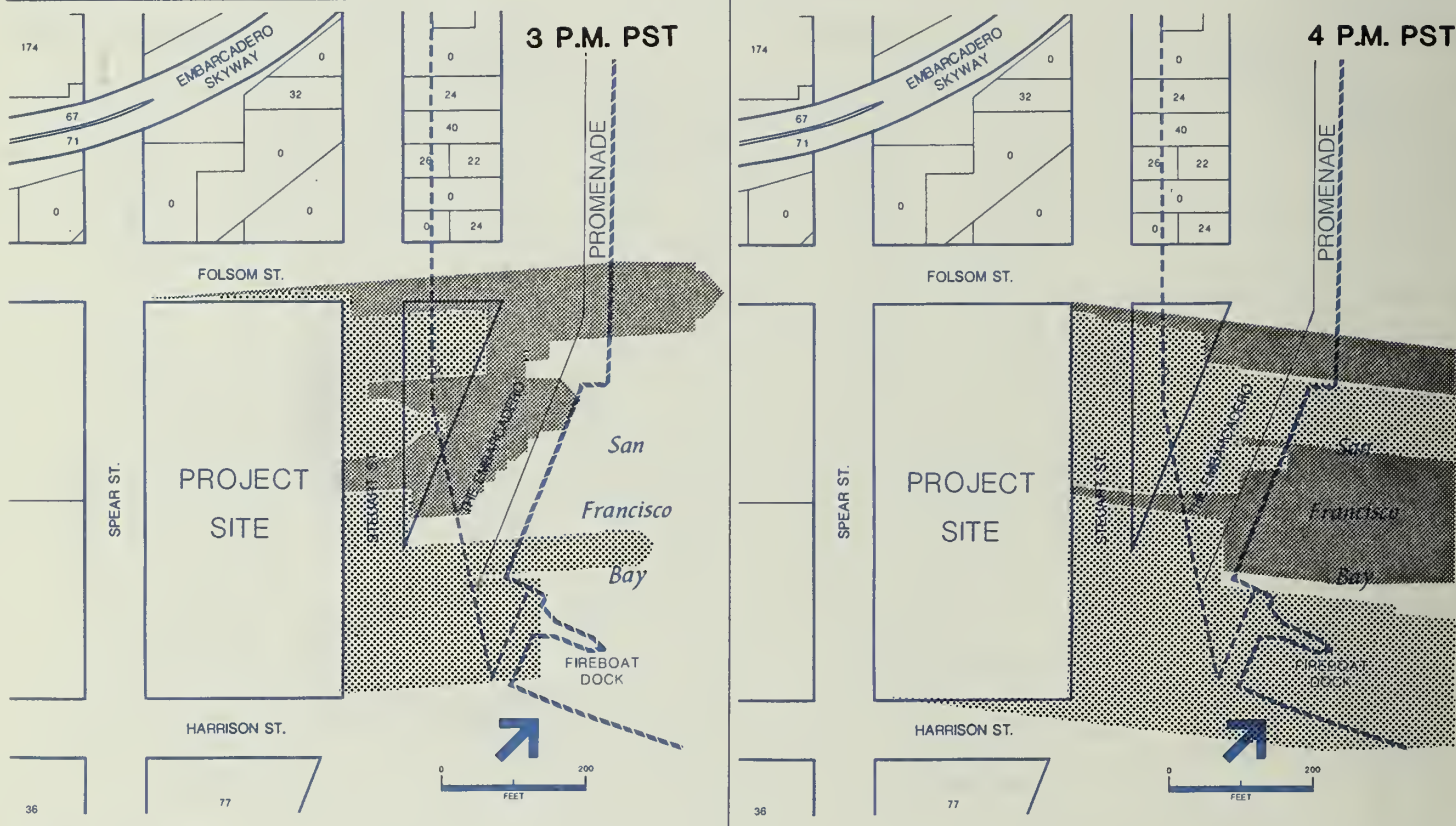
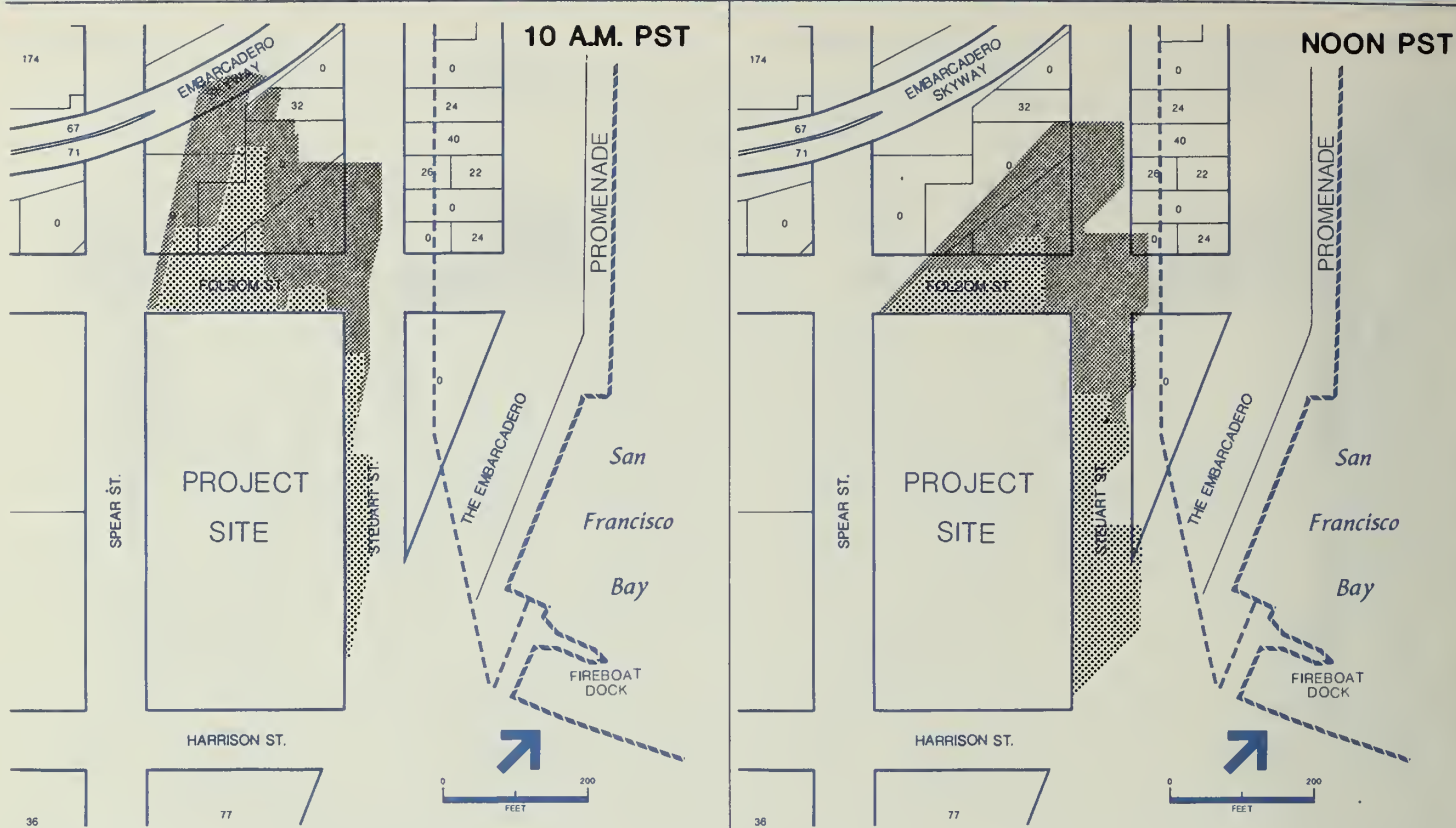


- Shadow from Existing Buildings (Includes Shadow from Landmark Bldg.)
- Net New Shadow from Proposed Project

- Boundary of Potential Open Space in Rincon Point Redevelopment Area

FIGURE 20C
OFF-SITE SHADOWS
IN PROJECT VICINITY -
SEPTEMBER 22

SOURCE: ESA



- Shadow from Existing Buildings (Includes Shadow from Landmark Bldg.)
- Net New Shadow from Proposed Project
- Boundary of Potential Open Space in Rincon Point Redevelopment Area

FIGURE 20D
OFF-SITE SHADOWS
IN PROJECT VICINITY -
DECEMBER 21

SOURCE: ESA

new project shadows would be cast on Folsom St. By 3:00 p.m., the project shadow would advance towards the northeast, partially shading Steuart St. By 4:30 p.m., new project shadows would lengthen on Steuart St. No new project shadows would be cast on the shoreline promenade during June.

September (PDT). Similar to March, new project shadow in September at 10:00 a.m. and noon would be created on the block northwest of the project. (See Figure 20C, p. 89.) The mid-morning shadow also would partially shade Spear St. The new shadow at 3:00 p.m. would extend northeastward across Steuart St.; by 4:30 p.m. the project would create new shadows on about two-thirds of the triangular block east of the site, but would not extend across The Embarcadero. No new project shadows would be cast on the shoreline promenade during September.

December (PST). New shadow created by the project would extend the farthest in December (see Figure 20D, p. 90). New shadow would reach adjacent blocks to the north and northwest at 10:00 a.m. and noon, and to the northeast out over the Bay at 3:00 p.m. and 4:00 p.m. At 10:00 a.m., new project structures would shade about half of the block located northwest of the project block; this new shadow would be cast on parking lots, portions of the Embarcadero Skyway, and on an industrial building just west of the Skyway. At noon, the new shadow would be cast in a northerly direction shading a corner of the block northeast of the project block, the Folsom and Steuart Sts. intersection, and a small portion of the block located north of (diagonal to) the project block. All portions of these blocks that would be shaded at noon are occupied by parking lots. No portion of the promenade would be shaded by the project at noon. In the afternoon at 3:00 p.m. and 4:00 p.m., new project shadow would extend northeastward across The Embarcadero and the shoreline promenade. By 4:00 p.m., a total of approximately 230 linear ft. of the promenade would be in new shadow created by the project. At 4:00 p.m., about 45% of this shadow would be from existing buildings west of the project block and from the existing landmark building.

Potential Redevelopment Area Park Site

During late afternoons in March, September and December, the project could shade portions of the area outlined by the San Francisco Redevelopment Agency (SFRA) for a 4-1/2 acre waterfront park proposed in the Rincon Point Subarea in the Rincon Point - South Beach Redevelopment Plan (See Figures 14, p. 46 and 20A, 20C and 20D,

p. 87 and pp. 89-90). There is no specific design for this potential park site; only the general boundaries have been defined. Development of the potential park site would require realignment of the existing Embarcadero roadway, and elimination of some existing blocks west of The Embarcadero, between Howard and Steuart Sts. If developed, the final configuration of the open space site also could be affected by the transit and roadway improvements contained in the I-280 Transfer Concept Program, which calls for extension of the Muni E-line, part of which would be above grade along The Embarcadero. SFRA indicates that development of the site is pending the outcome of the I-280 Transfer Concept Program./1/

On-site Shadows

Shadow impacts on the on-site open space proposed for the project were also analyzed. The open space would include the public mid-block plaza, the private open-air courtyards in the landmark building and new construction, the office terraces facing the mid-block plaza, the residential terraces east of the residential tower, and the common residential open space located on the rooftop of the base. Existing and proposed shadows cast on site by the project are shown on separate diagrams. These diagrams are presented separately because it would not be possible to distinguish on one diagram existing shadows cast by the buildings that would be demolished from shadows cast by new buildings.

March (PST). At noon all of the landmark courtyard, and about two-thirds of the mid-block plaza would be shaded by the existing landmark building. (See Figure 21A, p. 94.) By 3:00 p.m. about half of the plaza would be shaded, of which about 50% would be from the landmark building. The courtyards in the new construction would be about 75% shaded at noon, and entirely shaded by 3:00 p.m. (The shading shown over the courtyards would not necessarily reduce the amount of light received within the courtyards because shadows would not affect the amount of natural illumination from sunlight overhead and from sunlight reflected on the walls of the courtyard, the latter being a very bright source of light.) The office terraces would be in minimal shadows at noon; by 3:00 p.m., these terraces would be entirely in shadow from the new construction. The residential terraces would be about 30% shaded, and the common residential open space, east of the tower, about 15% shaded at noon. By 3:00 p.m., the residential terraces would be entirely in shadow and about 75% of the common residential open space would be in shadow.

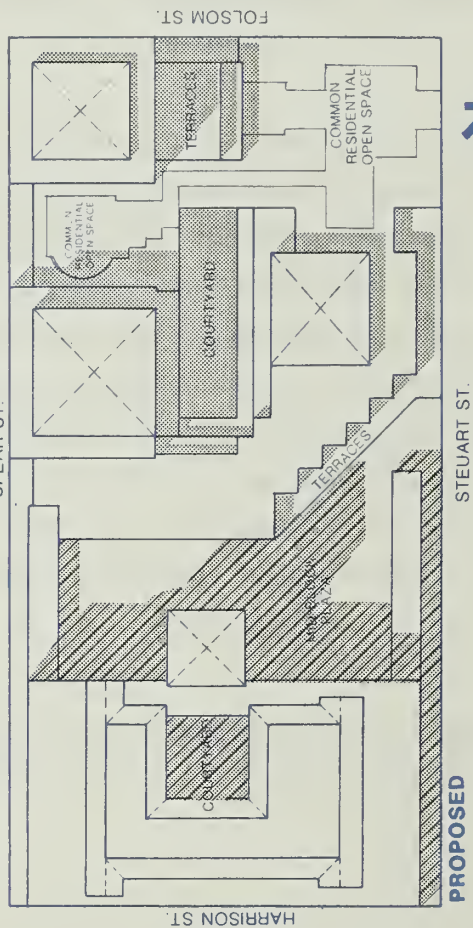
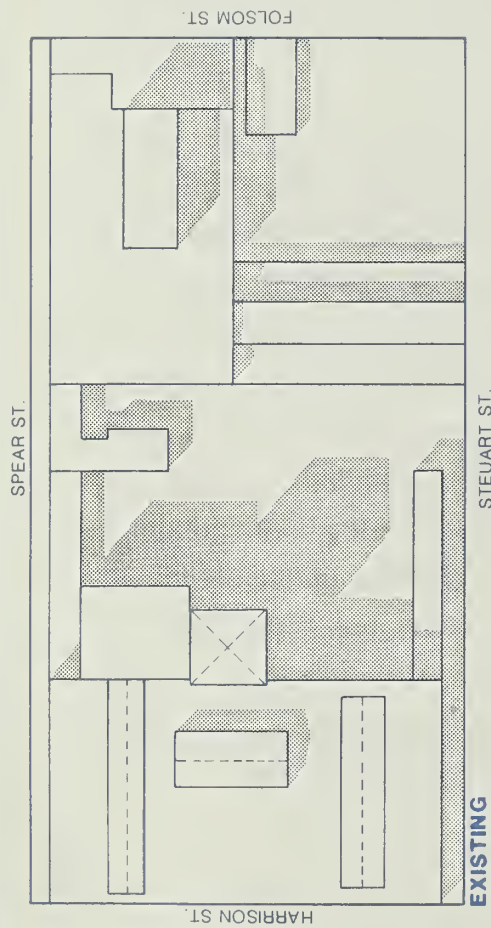
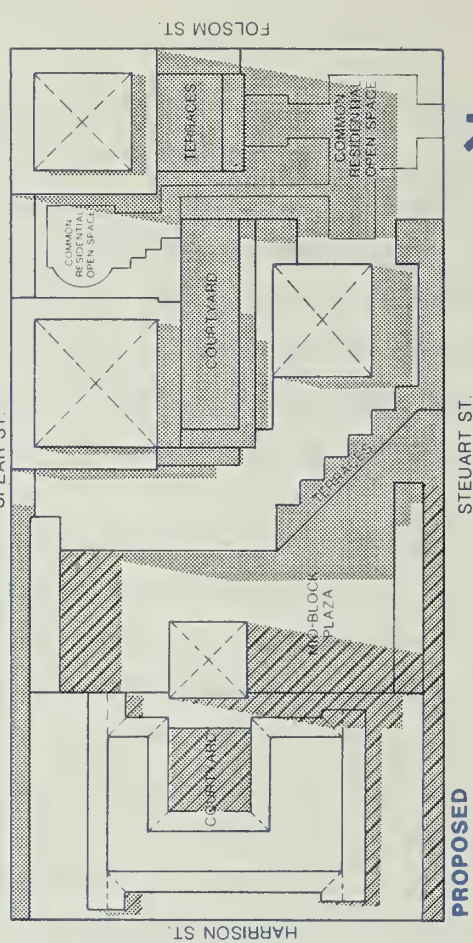
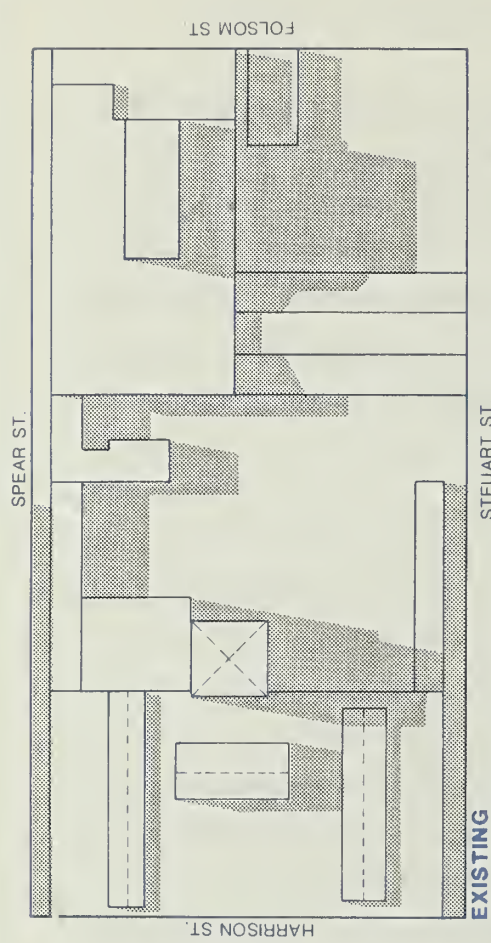
June (PDT). Shadows cast in June would least affect the public and private open-space areas on the project block. (See Figure 21B, p. 95) At noon, about two-thirds of the private landmark courtyard, and about one-third of the public mid-block plaza would be shaded by the landmark building. About half of the shadow cast on the mid-block plaza at 3:00 p.m. would be from the base of the new construction. About one-sixth of the courtyard in the new construction would be shaded at noon. Very little of the rooftop residential terraces and common open space would be shaded at noon; by 3:00 p.m. the residential terraces would be about 80% in shadow.

September (PDT). In September at noon, the mid-block plaza would be shaded about 75%, and the landmark courtyard entirely shaded by the landmark building (see Figure 21C, p. 96). At 3:00 p.m. all of the landmark courtyard would be shaded by the landmark building. About half of the mid-block plaza would be shaded at 3:00 p.m., about 75% by the landmark building and 25% by the new construction. At noon, the private courtyard in the new construction would be substantially shaded; by 3:00 p.m., this courtyard would be shaded extensively by the new construction. The office terraces would be shaded by the new construction at 3:00 p.m.; minimal shadows would occur on these terraces at noon. The residential terraces and common open space would be minimally in shadow at noon; by 3:00 p.m., all of the terraces and about one third of the open space east of the residential tower would be shaded.

December (PST). December shadows are the longest of the year, and would effect on-site open space areas more than any other time of the year. (See Figure 21D, p. 97.) The shadows created by the landmark building at noon and 3:00 p.m. would completely cover the landmark courtyard and would almost completely cover the mid-block plaza. The office terraces would be shaded entirely at noon by the landmark building, and entirely at 3:00 p.m. by the new construction. At noon and 3:00 p.m., the courtyard in the new construction would be shaded completely. About one-fourth of the common residential open space east of the tower would be shaded at noon; by 3:00 p.m. no shadow would occur on this area, however the common residential open space east of the tower would be almost completely shaded, and the residential terraces entirely shaded.

NOTE - Shadows

/1/ Frank Cannizzaro, Project Manager, Rincon Point - South Beach Redevelopment Area, San Francisco Redevelopment Agency, telephone conversation, August 20, 1984.



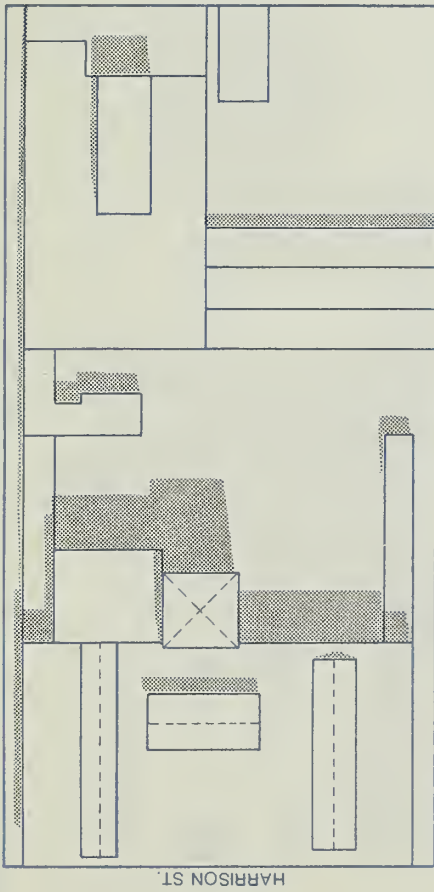
■ SHADOW FROM EXISTING LANDMARK BUILDING

The mid-block plaza would be public open space; the courtyards, terraces and residential open space would be private.

FIGURE 21A
ON-SITE SHADOWS -
MARCH 20

SOURCE: ESA

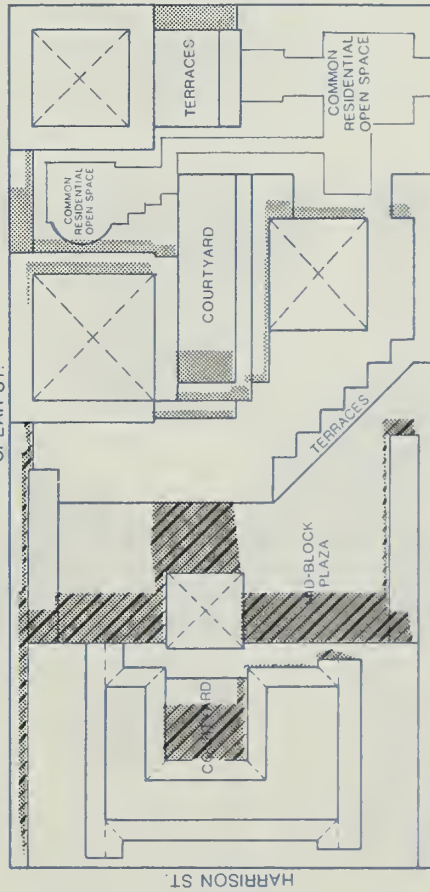
SPEAR ST.



EXISTING

STUART ST.

SPEAR ST.



PROPOSED

STUART ST.

NOON



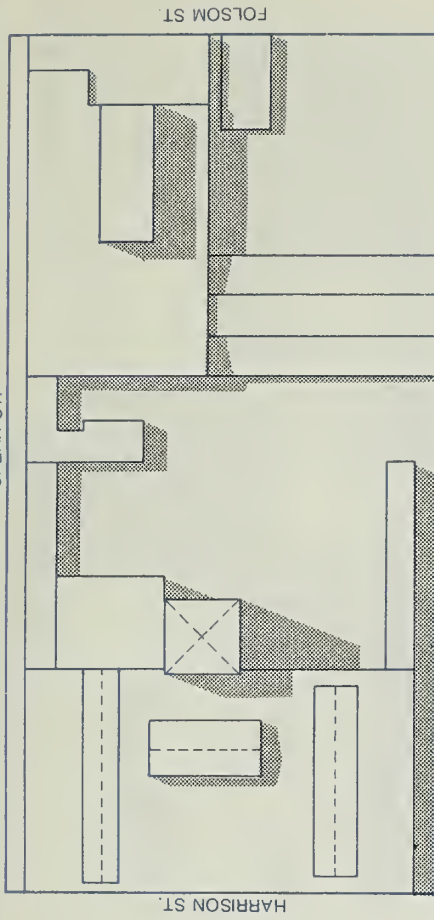
SHADOW FROM EXISTING LANDMARK BUILDING



The mid-block plaza would be public open space; the courtyards, terraces and residential open space would be private.

SOURCE: ESA

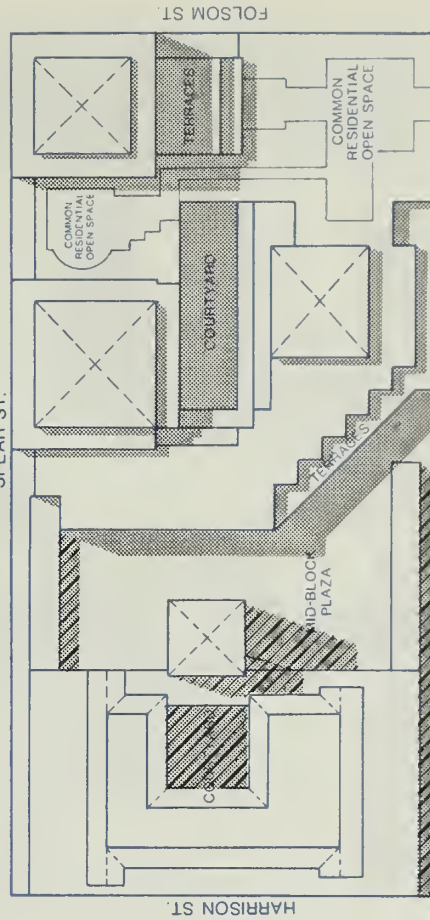
EXISTING



EXISTING

STUART ST.

SPEAR ST.



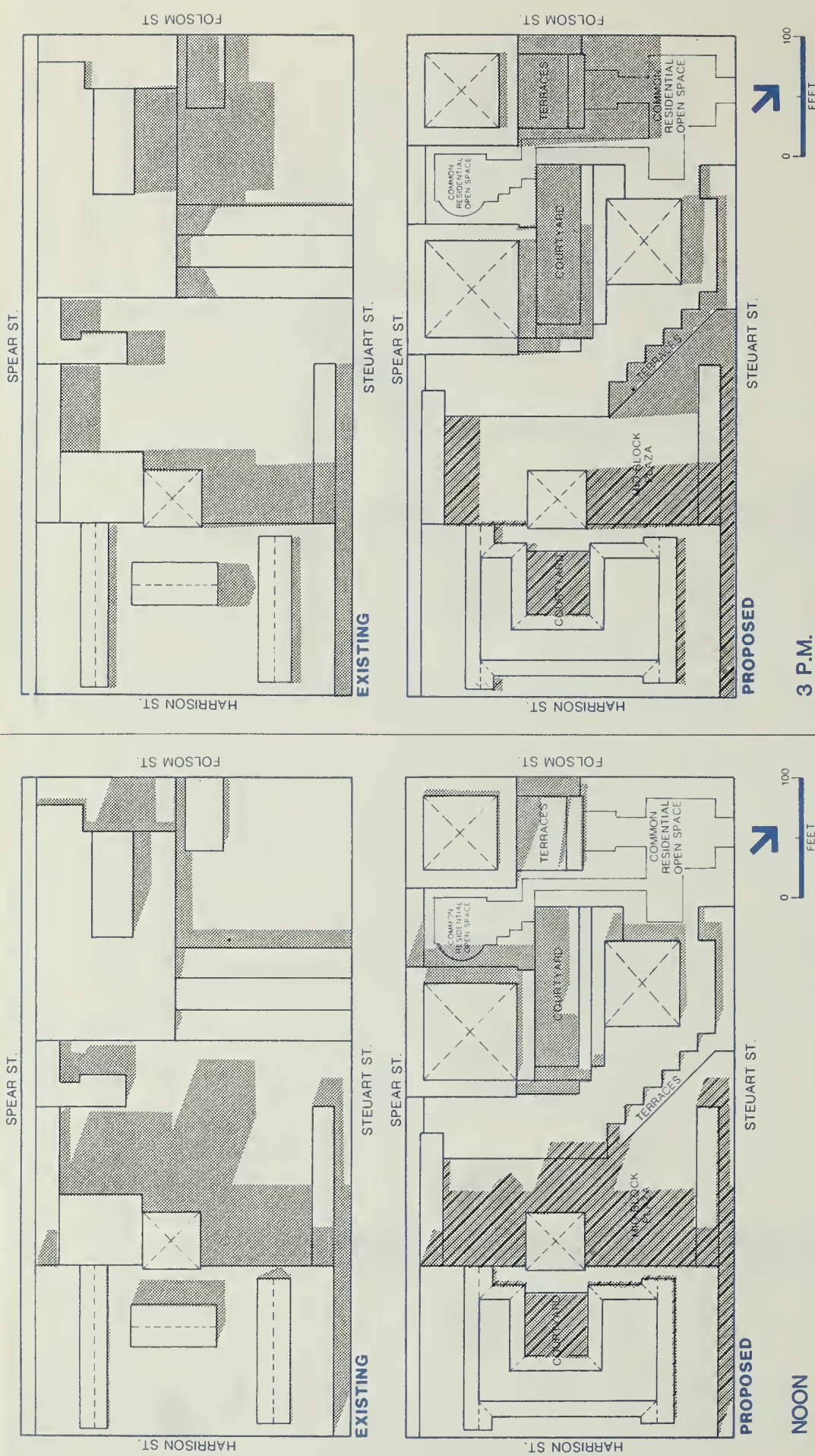
PROPOSED

STUART ST.

3 P.M.



FIGURE 21B
ON-SITE SHADOWS -
JUNE 21

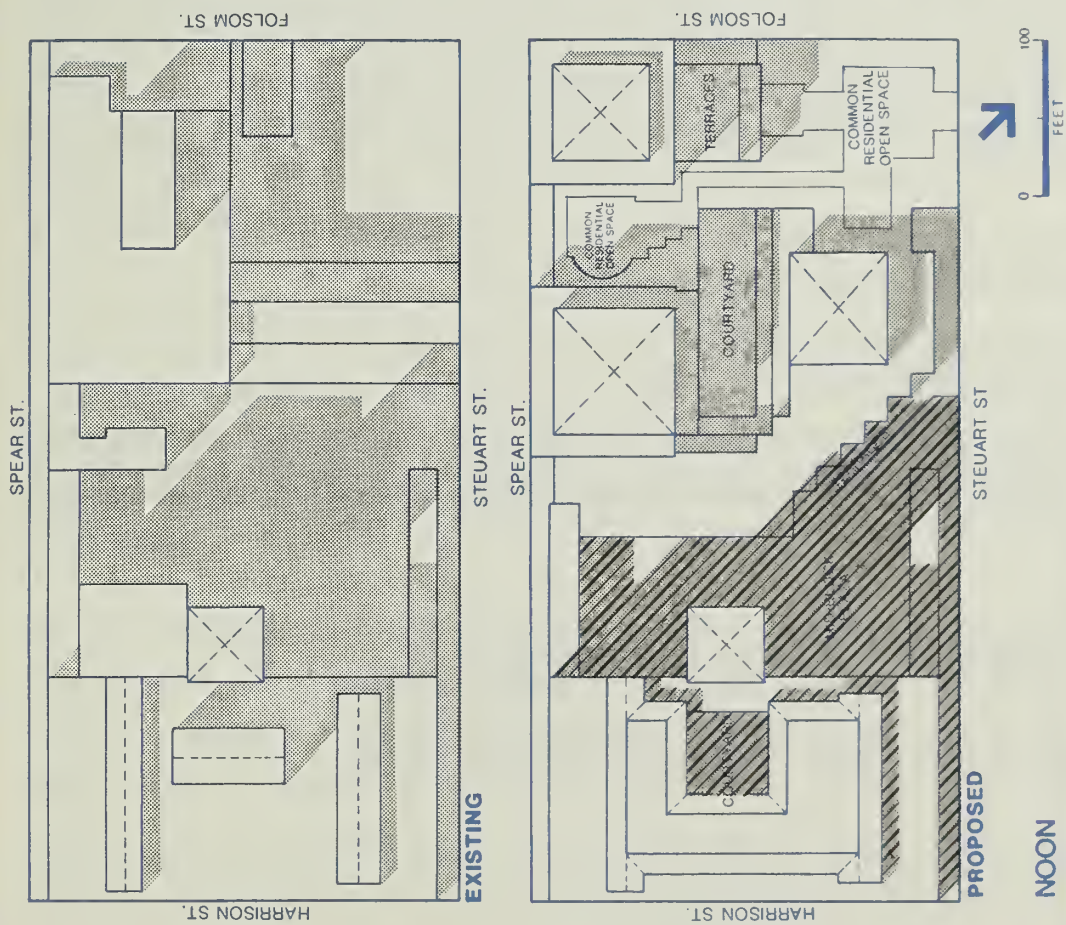
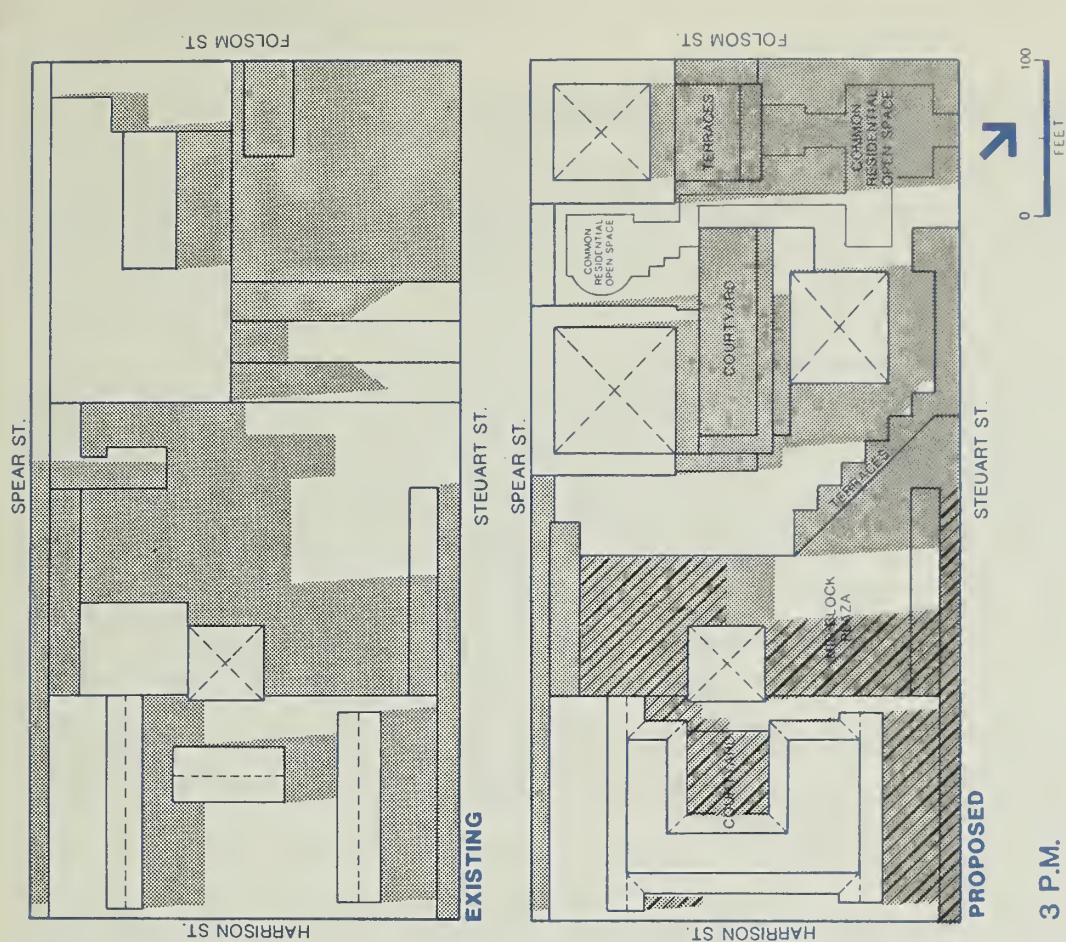


SHADOW FROM EXISTING LANDMARK BUILDING

The mid-block plaza would be public open space; the courtyards, terraces and residential open space would be private.

SOURCE: ESA

FIGURE 21C
ON-SITE SHADOWS -
SEPTEMBER 22



SHADOW FROM EXISTING LANDMARK BUILDING

The mid-block plaza would be public open space; the courtyards, terraces and residential open space would be private.

FIGURE 21D
ON-SITE SHADOWS -
DECEMBER 21

D. HISTORIC AND ARCHAEOLOGICAL RESOURCES/1/

Although not likely, two types of resources could be encountered during construction of the project, Gold Rush hulks and the foundations of two structures which occupied the site in the 1850s.

A review of available archival materials indicates that there are no remains of a Gold Rush hulk within, or immediately adjacent to, the Hills Plaza site. However, the amount of maritime traffic and the number of ships broken at Rincon Point indicate a possibility that one or more Gold Rush hulks could lie within the boundaries of the project site. The nearest Gold Rush hulks identified by the San Francisco Maritime Museum are several blocks north of the site. If a ship had been located in the immediate vicinity of the project site, it is likely that the extensive dredging and wharf building along Folsom, Harrison and Steuart Sts. during the late 1850s and 1860s would have required removal and disposal of ship hulk remains. It is possible, however, that an unanticipated find could be discovered during construction of the project.

It is possible that the foundations of the two early structures depicted on the 1853 U.S. Coast survey map became buried and are preserved below the surface of the project site. The most likely location for the recovery of potentially important cultural materials lies along the Spear St. property line. These two buildings were situated inside the natural shoreline, not on fill, and it is possible that when Spear St. was brought up to grade in the 1860s, the foundations of one or both of these structures may have become buried reasonably intact. If these two structures were to be discovered, it could represent a potentially significant archaeological find.

NOTE - Historic and Archaeological Resources

/1/ This section is summarized from: Allen G. Pastron, Ph.D., Archeo-Tec, Consulting Archaeologists, Hills Plaza, Cultural Resources Evaluation, June 20, 1984. This study is on file and available for public review at the Office of Environmental Review, 450 McAllister St., Fifth floor, San Francisco.

E. TRANSPORTATION, CIRCULATION AND PARKING

DEMOLITION, EXCAVATION AND CONSTRUCTION TRAFFIC/1/

Material and equipment storage for construction would be located adjacent to the project site on the triangular parcel (Assessor's Block 3743) bounded by Steuart St., Folsom St.

and the Embarcadero. Truck traffic for deliveries and materials removal would be concentrated on Steuart St. since this street provides access to both the project site and the proposed construction staging parcel. As Steuart St. and the construction staging parcel currently are used primarily for access to the Hills site and for Hills employees parking, respectively, construction activities would not disrupt through traffic or parking for adjacent land uses. Trucks would not be expected to queue on streets surrounding the project site because of scheduling and availability of off-street areas (on-site and the triangular parcel) for marshalling. It is anticipated that excavation spoils would be hauled to a Peninsula disposal site; trucks would be expected to use the Embarcadero and other surface streets to the south. Traffic would be temporarily disrupted on Steuart St. when trucks cross between the site and the staging parcel. This would have little effect on traffic conditions as existing traffic on Steuart St. is light.

No street or traffic lane closures or detours would be necessary during construction as there is sufficient space between the surrounding roadways and the property lines of the Hills block and the construction parcel. Basement excavation would require closure of the parking lane for a sidewalk detour on the Folsom St. side of Hills Plaza for approximately one year. Existing pedestrian activity in this area is very light. Adequate space is available on the Spear St. and Steuart St. sides of the project site to accommodate the basement excavation without requiring a sidewalk closure. Existing sidewalk widths on the Spear St., Harrison St., and Steuart St. sides of the landmark building are adequate to permit rehabilitation of the structure without requiring any sidewalk or traffic lane closures or detours.

Demolition and excavation would each generate an average of 35 to 40 truck round trips per day. The maximum number of truck round trips during each of these two construction activities is estimated to be between 50 and 60 per day. Steel erection and finishing would generate an average of six truck round trips per day. The maximum number of truck round trips during this period of construction is estimated to be between 10 and 12 per day.

The impact of construction truck traffic would be a slight lessening of the capacities of access streets and haul routes because of the slower movements and larger turning radii of trucks. Any truck traffic from 7:00 a.m. to 9:00 a.m. or from 4:00 p.m. to 6:00 p.m. would coincide with peak-period traffic, particularly at freeway access points.

Currently, there are three projects proposed in the site vicinity: 59 Harrison, an office rehabilitation project (83.213EV); 100 Harrison, an office conversion (82.523EZ); and Rincon Plaza (84.299E), a new residential development at Beale and Harrison Sts. While there is a possibility these projects would be under construction concurrently, no substantial cumulative construction effects are expected; the rehabilitation projects would require minimal truck activity, and new residential construction would involve alternate truck routes from those of the project.

As noted on pp. 58-59, the project site is located within an area where substantial changes to both the street and transit systems have been proposed. Several of the proposed changes would create temporary construction impacts that would affect access to the project site, either by direct street closure or by increased traffic volumes from detours. The proposals with the greatest effects on the project area are those involving removal of the Embarcadero Freeway, reconstruction of The Embarcadero roadway and realignment onto Steuart St., the Muni Metro breakout and surface trackway, and construction of the underground portion of the extension of the CalTrain Peninsula Commute Service to the Transbay Transit Terminal. Although these proposals have been the subject of a Draft EIR (I-280 Transfer Concept Program Draft EIR, 84.385E, September 1984), no schedules have been announced nor have construction effects been addressed. Should the project be under construction concurrently with one or more of the street or transit projects, access to the Hills Plaza site would be diminished and thus truck traffic to and from the Hills Plaza site would have a greater effect on the street system.

PROJECT IMPACTS

Travel Demand

On the basis of land use, the Hills Plaza project would generate approximately 17,300 person trip-ends (pte) per day./2/ About 16,630 pte would be from the office and retail space in the project (including the rehabilitated landmark building), while about 640 pte would be from the residential space. The existing office and industrial land uses on the site generate 2,900 daily pte. The net increase in person trips would be 14,400 pte per day. Projected net new p.m. peak-period and peak-hour outbound trips by mode are shown in Table 4, p. 101. The project would add about 1,800 new outbound trips during the p.m. peak period; approximately 1,100 of these new outbound trips would occur during the p.m. peak hour./3/

TABLE 4: ESTIMATED OUTBOUND TRAVEL DEMAND BY MODE FROM THE PROJECT (pte/a/)

<u>Travel Mode</u>	<u>P.M. Peak Period/b/</u>		<u>P.M. Peak Hour/b/</u>	
	<u>1984</u>	<u>2000/c/</u>	<u>1984</u>	<u>2000/c/</u>
Drive Alone	250	220	170	130
Car/Vanpool	200	200	150	150
Muni	420	390	220	210
BART	230	280	150	180
AC Transit	80	70	50	40
SamTrans	20	20	10	20
SP/Caltrain	30	40	20	30
Golden Gate Bus	50	60	30	40
Ferry	10	10	10	10
Walk Only	480	480	200	280
Other	<u>30</u>	<u>30</u>	<u>10</u>	<u>10</u>
TOTALS	1,800	1,800	1,100	1,100

/a/ Person trip-ends.

/b/ The peak hour occurs during the two-hour peak period of 4:00 to 6:00 p.m.

/c/ The year 2000 modal split accounts for changes in travel behavior which are assumed to occur as a result of growth in downtown San Francisco.

SOURCE: DKS Associates

Assignments to travel modes (including service and delivery vehicles) for the project have been made on the basis of modal splits from the Downtown Plan EIR (EE81.3) for the years 1984 and 2000./4/ The modal splits used were derived from data from the C-3 zoning district. The Hills Plaza site is outside the C-3 District. However, travel behavior at Hills Plaza in the future has been assumed to be similar to travel in the C-3 District because of the close proximity of the Hills site to the existing and proposed boundaries (in the Downtown Plan) of the C-3 District, as a result of the proposed transit improvements for the South-of-Market area, and because the commercial land uses proposed for Hills Plaza are similar to C-3 District land uses. Although the Hills Plaza project would not be completed in 1984, the 1984 modal split has been used for the purpose of identifying impacts at the single project level (as opposed to impacts at the cumulative level). The year 2000 modal splits have been applied to the project travel for the purpose of comparing project travel with cumulative future travel demand on the transportation system serving San Francisco (see Regional Cumulative Impacts, p. 110).

Parking demand was projected for Hills Plaza on the basis of the estimated vehicle traffic generated by the project. The office, retail and residential land uses at the project would create a demand for about 560 long-term parking spaces and about 60 short-term spaces, an equivalent daily demand of 620 spaces. Of this total, about 50 long-term spaces are associated with the 62,400 gross sq. ft. of existing office space which would be retained in the landmark building.

Pedestrian Movements

Pedestrian activity would occur at several locations around the Hills Plaza site. The main public entrance to the office space in the landmark building would be located on the east-west mid-block plaza. Access to other office and retail space in the project would occur along the north-south plaza and at entrances located on Spear St. and Steuart St. The residential entrances would be located in the northwest corner of the site near the intersection of Folsom and Spear Sts. (see Figure 5, p. 25).

The Hills Plaza project would generate approximately 400 pedestrian pte during the a.m. peak 15-minute period, approximately 650 pte during the midday (noon) peak 15-minute period and about 600 pte during the p.m. peak 15-minute period. By comparison, existing uses at the Hills Plaza site are estimated to generate 15-minute volumes of approximately 100 pte during the a.m. peak, 150 pte during the midday peak and 100 pte during the p.m. peak. Pedestrian travel destinations were estimated on the basis of projected major travel modes. Pedestrian trips were assigned to sidewalks and crosswalks on the basis of these destinations.

Operating conditions on sidewalks and crosswalks have been evaluated in terms of pedestrian flow categories, which relate the density of pedestrians in a specific time period (pedestrians per foot of clear sidewalk width per minute) to the quality of pedestrian flow (the difficulty of maintaining walking paths and speeds on a sidewalk). Table D-1, Appendix D, p. A-42, shows the relationships among flow rates, walking speed, path choice, and interactions among pedestrians for each flow category. Figure D-1, pp. A-43-44, shows photographs of sidewalk conditions for each flow category. The crowded category (14 pedestrians per foot per minute and above) is typically considered the upper limit for desirable pedestrian conditions./5/

Table 5, p. 104, summarizes pedestrian flow conditions at key points around the Hills Plaza site. Existing conditions at all locations may be characterized as open./6/ Existing (1984) plus project conditions (analyzed on the basis of existing effective widths) would be no worse than unimpeded, indicating ample facilities for pedestrians even under peak conditions. Maximum flows would be expected in the plaza and at the northwest corner of the site, as Spear St. would be a primary route to BART and the Transbay Transit Terminal. The project would shift the existing pattern of pedestrian travel from Harrison St. (primary access to the site) to the mid-block plaza and Spear St.

Although the future pedestrian operations on sidewalks and crosswalks adjacent to the project would be in good conditions, the design of the mid-block plaza (which complies with the intent of the proposed Rincon Hill Plan) would be expected to encourage mid-block pedestrian traffic across Spear and Steuart Sts. If the Embarcadero roadway is reconstructed and realigned onto Steuart St. or if the Muni Metro extension is on the surface along Steuart St., mid-block crossings would be hazardous. If either of the above changes to the street system is made, pedestrian crossings east of the project are under consideration to be consolidated at one crosswalk either at the intersection of Folsom St. and the Embarcadero (Steuart St.) or at Harrison St. and The Embarcadero./7/ Therefore, the design of the eastern side of the mid-block plaza may need to be modified to direct pedestrians to this intersection.

The project would conform with the objective of the Pedestrian Circulation Plan of the Transportation Element of the San Francisco Master Plan to "provide safe and pleasant space for pedestrians" by providing a mid-block pedestrian plaza./8/ The pedestrian plaza would provide an important link between the promenade along The Embarcadero and the east-west pedestrian street proposed for the Rincon Hill Plan.

Local Transit (Muni) Stop Usage

The Hills Plaza project would generate approximately 280 new p.m. peak-hour Muni trips, of which 220 would be outbound from the project. Transit ridership from Hills Plaza would be most noticeable on the Muni 32-Embarcadero line, which runs adjacent to the site. The 32-Embarcadero would provide convenient access from the project to the SP-CalTrain station at Fourth and Townsend Sts., the Ferry Building, and the

TABLE 5: PEAK 15-MINUTE PEDESTRIAN FLOW CONDITIONS/a/

<u>Sidewalks</u>	<u>Total Width (feet)</u>	<u>Effective Width (feet)/b/</u>	<u>Existing/c/ Conditions</u>			<u>Existing Plus Project/d/</u>		
			<u>A.M.</u>	<u>Noon</u>	<u>P.M.</u>	<u>A.M.</u>	<u>Noon</u>	<u>P.M.</u>
Folsom Street	10	5	0.3	0.2	0.3	0.4	1.2	0.9
Spear Street/e/	14	9	0.2	0.1	0.2	1.5	1.9	1.5
Steuart Street	14	9	0.1	0.6	0.1	0.1	0.2	0.1
Harrison Street	8	3	0.6	0.8	0.6	0.2	0.2	0.2
<u>Crosswalks</u>								
Across Folsom at Spear	14	14	0.2	0.1	0.2	1.0	1.4	1.3
Across Spear at Folsom	10	10	/f/	/f/	/f/	0.1	0.3	0.1
Across Steuart at Folsom	10	10	/f/	0.2	/f/	0.1	0.3	0.2
Across Harrison and The Embarcadero	8	8	/f/	/f/	/f/	/f/	/f/	/f/

/a/ Values in the table represent pedestrians per foot of effective walkway width per minute (p/f/m). See Table D-1, p. A-42 for description and Figure D-1, pp. A-43-44 for photographic examples.

/b/ The effective width is the narrowest portion of the sidewalk and is calculated by subtracting the space taken by poles, planter boxes, people standing at windows, etc., from the total width.

/c/ Estimated flow conditions based on existing uses on site.

/d/ Hills Plaza only; existing effective widths are used as the basis of these calculations.

/e/ Flow conditions would be improved from those shown in this table if the Spear St. sidewalks are widened as proposed in the Rincon Hill Plan.

/f/ Less than 0.1 p/f/m.

SOURCE: DKS Associates

Northeastern Waterfront area. As there is currently no Muni bus service which would provide convenient transfer service between the project and transit services in the Market St./Mission St. corridors, many project transit riders have been assumed to walk to BART or to the Transbay Transit Terminal even though these terminals are beyond the one-quarter mile radius assumed to represent walking distance from the site (see Figure 17, p. 60).

Table 6, p. 105, shows existing (1984) and project ridership on the 32-Embarcadero at the Hills Plaza site. The existing level of Muni service has been used as the basis

TABLE 6: EXISTING AND PROJECT MUNI 32-EMBARCADERO DEMAND AND LEVEL OF SERVICE IN PROJECT VICINITY DURING P.M. PEAK HOUR

	<u>Southbound</u>			<u>Northbound</u>		
	<u>Riders</u>	<u>P/S/a/</u>	<u>LOS/b/</u>	<u>Riders</u>	<u>P/S</u>	<u>LOS</u>
Existing/c/	310	0.65	B	20	0.13	A
Existing plus Project/d/	350	0.73	C	50	0.33	A

/a/ Passengers per Seat is the ratio of total demand to seated capacity.

/b/ Level of Service is a scale ranging from A to F that relates P/S ratios to passenger loading conditions on transit vehicles (see Table D-2, Appendix D, p. A-45).

/c/ Based on data collected Monday, July 2, 1984, by DKS Associates.

/d/ Project travel on basis of 1984 modal split. See Table 8, p. 118, for analysis of Muni operations outside the project vicinity in the year 2000.

SOURCE: DKS Associates and Environmental Science Associates, Inc.

of the analysis. At present, the 32-Embarcadero is lightly traveled northbound from the project in the p.m. peak hour. Southbound, the 32-Embarcadero carries downtown workers to the CalTrain depot. The project would be expected to generate about 70 new trips away from the project (including transfers) on the 32-Embarcadero. Forty of these trips would be directed southbound from the project area and 30 would be directed northbound from the area.

Although the Hills Plaza project would substantially increase ridership on the 32-Embarcadero in the project area, most riders would still be able to find seats and operating conditions would be expected to be acceptable. Northbound riders would use the bus stops on the east side of the Embarcadero across from Harrison St. and Folsom St. Southbound riders would use the bus stop on the northwest corner of Folsom St. and the Embarcadero.

Proposed Muni service improvement in the project vicinity would provide better and more convenient transit service for the project (see p. 59). The proposed Muni Metro extension would run adjacent to the project site, providing direct rail service to the SP-CalTrain station, Market St. subway stations (for both BART and Muni Metro), and the southwest sections of San Francisco. It would also allow convenient transfers to Transbay Transit Terminal bus services. The Muni Metro extension would shift project ridership from the

32-Embarcadero (for feeder service to other lines) to the Muni Metro. The construction of the E-line, while functioning in the area between Fisherman's Wharf and the CalTrain station as a replacement for the 32-Embarcadero, would be expected to provide some new service to residents of the northeastern portion of the Marina District via a proposed extension to Fort Mason. The new access on the E-line may generate an increase in ridership over that now experienced on the 32-Embarcadero.

The project would conform with the objectives of the Downtown Transportation Plan of the Transportation Element of the Master Plan to improve speed of transit travel and service by giving priority to transit vehicles by not providing vehicular access to the site via Steuart St. which is planned to be a Muni Metro route.

Transit Corridor Analysis

The project would contribute to increases in transit ridership in the major transit corridors leading from downtown San Francisco. Transit passengers from the project would reach major transit lines by walking from the project site or transferring from the Muni 32-Embarcadero. Existing peak-period and peak-hour transit ridership (see Table 8, p. 118) would be increased by 0.5% to 1.0%, with the greatest increases from the project riders occurring in the Muni northwest corridor. Ridership increases of this magnitude would not be measurable against the day-to-day fluctuations in transit ridership and would not have a noticeable effect on transit levels of service. Transit impact caused by cumulative development are discussed in the Regional Cumulative Impacts section, pp. 110-127.

Project Transit Costs

Muni. The estimated 1981-82 (most recent available) net marginal cost (or increase in the deficit for Muni operations) per additional ride is \$0.50./9/ This deficit-per-ride figure, because it is a marginal cost, is appropriate for small increases in Muni ridership (such as that requiring one or a few additional vehicle trips). Assessments of costs that would result from cumulative development require the inclusion of additional cost factors and may be best projected using average costs. It is reasonable to conclude that average costs would be significantly higher than marginal costs.

IV. Environmental Impact

The project would generate about 196,600 peak-period rides per year, which would generate a cost deficit to Muni of about \$98,300./9/ This conclusion should be qualified because the Muni deficit-per-passenger-trip figure is based on 1981-82 data, and because the total project-generated deficit is calculated only for those riders who use Muni as their primary mode of transportation, excluding riders who would use a combination of transportation modes, such as Muni and Caltrain. More-recent data that would allow a more precise estimate of costs are not available. The project would offset this deficit through its contributions to the General Fund, the Transit Development Impact Fee, and sales tax revenues.

On April 27, 1981, the San Francisco Board of Supervisors approved Ordinance 224-81 to assess new downtown commercial development to support Muni. The ordinance established a one-time fee of up to \$5.00 per gross square foot upon construction of new downtown office space, to provide funds for operating costs and capital improvements for Muni transit services. On September 27, 1984, the ordinance was upheld in San Francisco Superior Court. Further legal appeals of the ordinance may be made. Under the ordinance, the project could generate up to about \$2.62 million in one-time fee revenues to Muni. This fee is intended to recover additional transit costs for the entire economic life of a building, and thus cannot be compared directly to the annual Muni deficit discussed above. However, the fees collected under the Ordinance would reduce the amount of General Fund revenue support necessary for existing and future Muni operations.

The project would also offset the Muni deficit through its contributions to General Fund revenues, which would be derived from a variety of taxes levied on the proposed project. In the past, a portion of General Fund revenues have been allocated to Muni. The historical level of contribution of General Fund revenues to Muni may change, however, due to the recent court approval of the Transit Development Impact Fee. Because of the variable relationship of the sources from which Muni receives operating funds, the annual General Fund contribution to Muni from the project cannot be quantified.

According to a memorandum entitled "Muni's Plans to Accommodate Downtown Growth," Dean Macris, Director of Planning, August 5, 1982, Muni expects to be able to meet projected cumulative demand due to downtown office development without new City taxes. According to the worst-case scenario in the memorandum, the San Francisco

Municipal Railway Improvement Corporation, a nonprofit corporation established in 1971 for the purpose of selling bonds for transit improvements, may have to raise about \$111 million through the sale of bonds over a ten-year period to finance Muni expansion. Muni would also be expected to receive additional revenues from the recent increase in the Federal gasoline tax, although this revenue source cannot be projected reliably at this time.

BART. For the 1983-84 fiscal year, the average net operating deficit per passenger trip for BART was about \$1.06./10/ On the basis of about 345,500 rides per year, the estimated annual BART deficit attributable to the project would be about \$366,200./11/ The project would generate a total of about \$33,400 in revenues to BART, including about \$6,600 in property tax revenues, and about \$26,800 from the 75% of the 0.5% transit sales tax allocated to BART. This amount does not include the remaining 25% of the 0.5% BART sales tax revenue distributed by MTC among BART, Muni and AC Transit. After subtraction of BART's revenues from sales and property taxes that would be generated by the project, the net operating deficit of BART due to the project would be about \$332,800. BART's operating deficit per passenger is likely to decline in real terms as planned service improvements become operational in the future.

Local Intersection Traffic

Hills Plaza project traffic would enter the on-site parking garage from Folsom St. and exit the garage to Spear St. With the existing one-way street operations, all inbound traffic would approach the project from the west, either eastbound on Folsom St. or southbound on Spear St.

The Folsom St. garage entrance would be two lanes wide and controlled by entry gates activated by coded cards (long-term and resident parking) or ticket dispensers (short-term parking). Each lane would have room to store two vehicles awaiting service, without encroaching upon the Folsom St. right-of-way. During the a.m. peak hour (assumed to be the peak arrival period) this storage space would be adequate to prevent queued vehicles from extending across the sidewalk or onto Folsom St. and interfering with traffic flow.

All outbound traffic would turn left at the garage exit and travel south on Spear St. Northbound traffic would be expected to turn east on Harrison St. and north on the Embarcadero. Southbound and westbound traffic could use Spear St. to the

Embarcadero or Harrison St., although westbound vehicles on Harrison St. would encounter queues at the freeway on-ramps during the p.m. peak.

Table 9, p. 123, shows traffic Levels of Service at intersections near the project site. Levels of Service are defined in Table D-3, Appendix D, pp. A-49-50. The existing street network has been used as the basis for the above analysis. Proposed changes that would be included as part of the proposed Rincon Hill Plan/12/ or I-280 Transfer Concept Program have not been included in this analysis (see Rincon Hill Plan discussion of this section, p. 132)./13/

Freeway On-Ramp Intersection Analysis

Traffic operations at intersections near freeway ramps serving the project site vicinity are shown in Table 9, p. 123. The intersections of Mission and Beale Sts. and First and Harrison Sts. are at Level of Service E and F, respectively, during the p.m. peak hour. Queues of vehicles are present during the p.m. peak hour on the approaches to the on-ramp at First and Harrison Sts. Vehicles from the project would be expected to contribute to the existing jammed conditions at this intersection. The project effects at the intersection of Mission and Beale Sts. would not be sufficient to change either the v/c ratio or Level of Service during the p.m. peak hour.

Freeway Corridor Analysis

The project would contribute to increases in traffic on the major freeways serving downtown San Francisco. Traffic generated by the project would increase total traffic on major freeways during the p.m. peak period and the p.m. peak hour by about 0.2%. Such increases would not be measurable against the day-to-day fluctuations in traffic volumes. Because the Bay Bridge eastbound traffic flow is functionally at capacity, the travel demand from the project would not be expected to increase the flows on the Bay Bridge in the peak hour; rather the East Bay-bound auto traffic from the project would most likely displace existing users of the Bay Bridge into later portions of the peak period. This displacement would occur primarily as a result of the project's proximity to the on-ramps at First and Harrison Sts. which would allow project travel quicker access to, and in essence, head-of-line privileges at the Bay Bridge eastbound. Freeway impacts caused by cumulative development are discussed in the Regional Cumulative Impacts section, pp. 110-127.

REGIONAL CUMULATIVE IMPACTS

To date, cumulative analysis of transportation impacts has been conducted on the basis of a list of proposed development in the greater downtown area (see Table C-2, Appendix C, p. A-36, for the March 10, 1984 list of these projects). The Downtown Plan EIR method is a refinement of the transportation analysis process that uses forecasts of employment growth, independent of a list of proposed projects, to project future travel./14/

The travel data presented in the Downtown Plan EIR transportation sections (and in the transportation analyses for this report) are projections of total demand on the transportation system serving San Francisco. The projections comprise three components of travel demand. Two of the components were developed through an intricate travel modelling process for the C-3 District of San Francisco. These first two components of travel demand are C-3 District work (employee journey to and from work) travel and C-3 District non-work (all other) travel. The third component is non-C-3 District travel, which was forecast through an analysis of regional trends adjusted for the effect of development in the C-3 District. Non-C-3 travel is defined as travel that has neither an origin nor a destination in the C-3 District. Thus, non-C-3 travel includes travel to and from other parts of downtown and trips through San Francisco from other parts of the region. Employment forecasts are not specifically used in the non-C-3 travel analysis.

Because the Downtown Plan EIR transportation analysis has included forecasts for travel demand from outside the C-3 District, the projections of total future demand at the regional screenlines include the demand from the Hills Plaza project (in a non-specific manner). Thus, the Downtown Plan EIR transportation projections and method of analysis are relevant and applicable to the analysis of the transportation impacts of the Hills Plaza project in the cumulative context. Because of the magnitude of the information contained in the Downtown Plan EIR, it is necessary to summarize portions of that information in this document so that there may be a better comprehension of the cumulative transportation projections. The following discussion highlights the basic points of the cumulative future travel demand projections. Additionally, because the City has been using a cumulative list-based method to analyze cumulative impacts, a comparison of the list method and the Downtown Plan EIR method is included below. This section also shows the results of the impact analysis using the list-based method.

Summary of Downtown Plan EIR Method. The Downtown Plan EIR method projects future travel on the basis of modal splits that are assumed to change over time in response to transit service improvements and to increased levels of peak-period congestion on auto facilities. The transit service improvements assumed to occur by the year 2000 correspond to the vehicle acquisition portions of the Five-Year Plans for Muni, AC Transit, SamTrans, CalTrain, and Golden Gate Transit. For BART, both the vehicle acquisition program and the trackage improvements (Daly City Turnback/Storage Facility and the KE track, also known as the "Oakland Wye") were assumed to occur.

The Downtown Plan EIR transportation analysis also assumes that regional auto use will continue to change over time in response to increasing levels of congestion on the bridges and freeways serving the City. The analysis projects a shift from single-occupant auto use (drive alone) for commuting to ridesharing (carpool, vanpool) and to transit use. The assumptions of continuing shift from auto to transit and ridesharing, most apparent in the year 2000 modal splits, are made on the basis of long-term trends in transit use in the San Francisco commute corridors. Census data show that in the period 1970 to 1980, transit use for commuting to downtown increased. Similarly, Bay Bridge data show that ridesharing has been increasing over the last seven years./15/ Thus, the shift to transit and ridesharing is well-established in San Francisco commute corridors.

The Downtown Plan EIR approach for forecasting future land use, employment, and residence patterns is based on a conceptual framework of the process of urban economic development. The analytical procedures incorporate a variety of types and sources of data and information concerning past, current, and likely future conditions regarding economic, real estate, demographic, and public policy factors./16/ The employment forecasts have been used as the basis for the travel demand modelling process. As described above, the C-3 District travel comprised two of the three components of total travel. Because of the use of the employment forecasts in the travel demand modelling process, the transportation projections for the year 2000 are independent of lists of cumulative development.

The travel demand modelling process comprises the following steps:

- Trip generation rates (empirical measures of total travel to and from a specific land use) were applied to C-3 District employment forecasts by business activity (i.e., different rates were used for various land uses).

- The total travel from the C-3 District was distributed to seven Bay Area zones on the basis of forecasts of future employee residence patterns and origin-destination patterns for non-work travel.
- Trips to each of the seven regional zones were assigned to travel modes on the basis of modal splits (distribution of travel over the transportation modes, auto, transit, etc.) developed from the C-3 District surveys.

The total future travel demand was calculated by summing C-3 District work and non-work travel and non-C-3 travel at sub-regional measuring points (called screenlines) located at or just beyond the San Francisco County Line (except for Muni and BART Westbay service which were measured inside San Francisco, outside the downtown).

The non-C-3 travel demand was forecast through the use of growth factors developed on the basis of historic trends in regional and sub-regional travel./17/ Historic growth rates (factors) have been used to project increases only for non-C-3 District travel at the regional screenlines. No other use of historic growth rates has been made in the transportation analysis. Because of the individual and unique nature of each of the transportation screenlines, each growth rate is based on data for that location. Thus, the growth rates for freeways project growth in auto trips, while the growth rates for transit project growth in ridership. Each of the historic growth rates inherently contains information about regional growth in travel patterns and thus incorporates not only growth from other parts of San Francisco, but from elsewhere in the region. As an example, the historic growth factor for trips southbound on US 101 includes travel that crosses the Bay Bridge or the Golden Gate Bridge as well as travel from San Francisco. However, the growth is projected as growth in auto travel and cannot be directly related to growth in employment in San Francisco. It is within the context of non-C-3 growth at the screenlines that travel from Hills Plaza has been analyzed at the regional cumulative level.

Comparison with List-based Method. The other process used to forecast cumulative transportation impacts starts with a list of cumulative office and retail development (net new office and retail space) proposed, approved or under construction in the greater downtown area (of which, the C-3 District is a portion). From that list, through the use of established trip generation rates, projections of travel demand are made. The estimated travel is assigned to modes on the basis of modal split factors which are assumed not to change over time. The Transportation Guidelines for Environmental Impact Review: Transportation Impacts (Department of City Planning, September 1983, hereinafter

Transportation Guidelines) describe the process and the data used to calculate transportation impacts from the development on the Cumulative List.

The current list, shown in Appendix C, Table C-2, pp. A-36-39, has about 19 million gross sq. ft. of net new office space and about 0.9 million gross sq. ft. of net new retail space. On the basis of the Transportation Guidelines analysis, the list-based development would generate approximately 80,000 p.m. peak-period person trip-ends, of which about 49,000 would occur in the p.m. peak hour. Table 7, p. 114, shows a comparison of the projections of travel demand from the list-based analysis and from the Downtown Plan EIR for the year 2000. While the list contains development both inside and outside the C-3 District, the Downtown Plan EIR makes specific projections only for C-3 District development, and the travel components shown in Table 7 are for the C-3 District only; therefore, for purposes of comparison, travel from the C-3 component of the list (about 13 million gross sq. ft. of net new office space and 0.4 million gross sq. ft. of retail space) has been analyzed for comparison with the projections from the Downtown Plan EIR for Alternatives 1 to 5 and the Downtown Plan. (The C-3 component of the list is used only in Table 7; all other uses of the list in this document use the entire 19 million gross sq. ft. of office space and 0.9 million gross sq. ft. of retail space.)

As shown in Table 7, travel demand from the Alternatives in the Downtown Plan EIR ranges from Alternative 1 (about 17% higher than the Downtown Plan) to Alternative 4 (about 5% lower than the Plan). Although there is a range, the spread is within the level of accuracy of the transportation analysis, and thus, statistically, the transportation impacts of the Alternatives are equivalent to those of the Downtown Plan.

Several anomalies are apparent in the data shown in Table 7. The major anomaly is that, while the C-3 component of the list would generate about half as much travel as do the Downtown Plan and the five Alternatives, the list-based analysis yields projected travel demands within San Francisco (inside and outside the C-3 District) that exceed those generated by the Downtown Plan and the Alternatives. A brief explanation of this anomaly is presented in the following paragraphs.

The difference in total travel results in part from the different time frames of the list and the Downtown Plan EIR. The Downtown Plan EIR established 1984 as the baseline year and 1990 and 2000 as target study years. Estimates of growth were

TABLE 7: COMPARISON OF LIST METHOD AND ECONOMIC FORECAST METHOD - OUTBOUND P.M. PEAK-HOUR CUMULATIVE TRAVEL DEMAND FOR THE C-3 DISTRICT (person trip-ends)

Mode of Travel	3/10/84 List/a/	Downtown Plan (1984-2000)/b/	Alternative 1 (1984-2000)/b/	Alternative 2 (1984-2000)/b/	Alternative 3 (1984-2000)/b/	Alternative 4 (1984-2000)/b/	Alternative 5 (1984-2000)/b/
Work	22,100	41,400	47,600	46,200	44,400	39,100	39,700
Other	8,200	12,100	14,700	14,200	13,400	11,800	11,800
Total	30,300	53,500	62,500	60,500	57,900	51,000	51,600
Muni Northeast	900	1,600	1,700	1,600	1,600	1,700	1,700
Northwest	3,700	1,800	2,000	1,900	1,800	1,800	1,800
Southwest	3,100	1,100	1,100	1,000	900	800	800
Southeast	600	1,100	1,000	1,000	1,000	600	700
BART Transbay	4,500	11,800	13,300	13,100	12,700	11,300	11,300
Westbay	1,900	2,400	2,800	2,700	2,600	2,300	2,300
AC Transit	1,700	200	600	500	300	-100	-100
GGT Bus	1,100	3,200	3,700	3,600	3,500	2,700	3,100
Ferry	300	800	800	800	800	800	800
Sam Trans	300	1,200	1,300	1,300	1,200	1,000	1,100
SPRR/CalTrain	500	1,800	2,000	1,900	1,800	1,700	1,700
Regional Auto/c/							
Golden Gate Bridge	370	410	630	590	540	390	370
Bay Bridge	960	1,250	1,550	1,540	1,510	1,060	1,110
Bayshore Freeway (U.S. 101)	420	470	650	620	590	400	400
Interstate 280	420	470	650	620	590	400	400

/a/ Travel from only those projects on the list that are located inside the C-3 District. The list also contains development located in the greater downtown area outside the C-3 District; travel from those projects has been included in the list-based travel shown in the Regional Impacts section.
 /b/ Travel from the C-3 District only. The transportation analysis used in the Downtown Plan EIR assumes growth in regional travel that is not shown above; the regional (non-C-3) travel is included in the travel projections in the Regional Impacts section.
 /c/ Vehicle trip-ends; calculation made on the basis of 2.7 persons per carpool and 12 persons per vanpool. Person trip-ends on transit cannot be added to vehicle trip-ends to obtain total person trip-ends because of the varying numbers of persons per vehicle.

SOURCE: Environmental Science Associates, Inc.

made on the basis of forecasts and projections for each of the target years for the range of alternatives. In contrast, the projects included on the cumulative list span a period from 1984 to sometime in the early or mid-1990's when completion of all projects on the list or a similar amount of square footage would be expected./18/ This is one of the major reasons why results of impact analyses using these two methods are not directly comparable.

The variations in travel by trip purpose (work, other) and by travel mode (as shown in Table 7) between the list-based method and the Downtown Plan EIR method can be explained by differences in the methodologies and databases used to forecast the travel demand. The list-based analysis employs single-use trip generation data to estimate total travel through the process of adding together the trip generation estimates from all the individual buildings on the list. These single-use trip generation rates do not account for trips going from one building to another within the Downtown. Studies for the Downtown Plan EIR have confirmed that there is considerable travel between land uses in the downtown area. The Downtown Plan EIR analysis uses trip generation rates that compensate for this travel that remains internal to downtown. The list-based analysis adds each trip as if it were a new trip in or out of the downtown, and thus overestimates the total number of peak-hour and peak-period trips in and out of the downtown area.

The differences in distribution of travel among modes (shown in Table 7) are the product of refinements made to the regional distribution and modal splits during the Downtown Plan EIR process. The list-based analysis assumes a static (unchanging over time) regional distribution and static modal splits. The Downtown Plan EIR analysis has incorporated changes in both the regional trip distribution (reflecting forecast availability of housing) and the modal splits (reflecting projected availability of roadway and transit capacity in the future).

Differences in travel among the modes are the result of the refined modal split used in the Downtown Plan EIR method. Because the list-based analysis assumes that modal split remains constant over time, the list-based analysis is insensitive to the abilities of transit agencies and regional roadway systems to serve future demand. The Downtown Plan EIR analysis has assumed that the modal split would change over time in response to the increasing levels of congestion at the regional screenlines. Thus, because the Bay Bridge is at or near capacity in the p.m. peak hour eastbound, the Downtown Plan

EIR modal split projects a proportionately lower increase in peak-hour auto demand to the East Bay than does the list-based analysis. Use of this changing modal split is a refinement that allows the travel model to more accurately forecast travel demand, and thus the Downtown Plan EIR transportation results represent a more accurate level of projection than has been possible using methods and data available to date.

Pedestrian

Pedestrian trips linking Hills Plaza land uses with other residential and commercial development in Rincon Hill have already been analyzed in the project level analysis on pp. 102-104. The proposed 59 Harrison renovation would use the same pedestrian corridors as Hills Plaza to access regional transit lines, and would also share the 32-Embarcadero bus stop at Harrison St. Additional pedestrian trips in the future would be through trips adjacent to or across the Hills Plaza site; such trips would not have an origin or destination at land uses at Hills Plaza. Through trips would come principally from travel between development in the Rincon Hill Plan area and the Embarcadero, and travel between South-of-Market development and parking in the Rincon Hill area. The east-west mid-block plaza in Hills Plaza would be part of a major pedestrian walkway linking Rincon Hill residential areas with the Embarcadero promenade. Most of these pedestrian trips would be expected to be recreational rather than commute-oriented and thus would not be expected to coincide with peak commute travel. Should the two coincide, the available sidewalk and mid-block plaza capacity would be sufficient to allow operating conditions to remain within acceptable limits.

The project would also contribute to cumulative growth in pedestrian traffic south of Market St., especially along pedestrian corridors leading to regional transit centers. The proposed Muni service improvements, particularly the Muni Metro extension, would substantially reduce project pedestrian trips north of Folsom St. as the additional transit service would be expected to facilitate transfers between lines (and thus would reduce the number of pedestrians assumed to be walking to transit stops off the project block, see p. 102) and to serve new areas near the project. The Muni Metro service, depending upon station (stop) location, could also increase the through travel on the mid-block plaza as the Metro would attract riders from other Rincon Hill developments.

Transit

The transit agencies serving downtown San Francisco carry approximately 60% of the peak-period employee work travel, as well as about 20% of the peak-period other

travel. P.m. peak-hour and peak-period loadings on the local and regional transit routes were found to be at or near capacity for some of the routes in 1984 (see Table 8, p. 118). The transit analysis calculates capacity on the basis of all runs leaving the C-3 District in the p.m. peak. For all of the transit analyses, only peak-direction vehicles are counted. The values shown in Table 8 are sums over the peak hour and the two-hour peak period. Within the peak hour, there would be periods of time when the loading ratios would be higher than those shown for the hour (peak-of-the-peak conditions). Individual transit vehicle loadings vary on a day-to-day basis because of fluctuations in ridership (demand) and because of variations in operating conditions caused by traffic congestion, equipment availability, and/or system breakdowns. Photographic examples of p.m. peak-hour loadings on Muni vehicles are shown in Appendix D, Figure D-2, pp. A-46-48.

Because the transit system serving San Francisco also provides service to other parts of the Bay Area, there are competing and conflicting demands placed upon the transit network by riders with destinations other than Downtown San Francisco. The locations of the analysis screenlines are such that the amount of San Francisco travel on the transit system is at or near a maximum at each screenline. The location of the screenlines is such that it may appear that travel demand from other development in the areas served by the transit network may not be included in the cumulative analysis. BART is the only transit system analyzed that provides substantial service to destinations other than San Francisco. While it is true that eastbound, southbound, and northbound travel from downtown Oakland development cannot be counted at the eastbound transbay screenline, BART's ridership is most concentrated in the Transbay Tube (its maximum load point). Analysis has shown that the eastbound loadings experienced in the Transbay Tube equal or exceed loadings observed on the same BART lines at the next set of BART screenlines which include all BART activity within the downtown area of Oakland. Thus, on the basis of maximum load point locations and system loading characteristics, use of the transbay screenline for San Francisco travel analysis is appropriate, since the maximum eastbound BART loadings occur at this screenline.

All other transit service analyzed provides radial service to San Francisco on an almost-exclusive (express) basis. Under the operating charters of Golden Gate Transit, AC Transit and SamTrans, the three transit agencies are not allowed to provide local service within the City and County of San Francisco (e.g., a person boarding

TABLE 8: OUTBOUND REGIONAL TRANSIT DEMAND AND LEVEL OF SERVICE

Transit Agency	1984				2000				1984 + CUMULATIVE LIST			
	Riders	P/S/a/	LOS/b/	Demand	P/S	LOS	Project Percent/c/	Rounded Demand	P/S	LOS	Project Percent/c/	
P.M. Peak Hour												
Muni												
Northeast	7,100	1.16	D	8,800	1.05	D	0.5	8,700	1.04	D	0.6	
Northwest	8,200	1.26	E	10,100	1.25	D	0.7	12,900	1.59	F	0.6	
Southwest	13,500	1.45	E	16,600	1.42	E	0.4	17,500	1.50	E	0.4	
Southeast	5,300	1.06	D	7,400	1.01	D	0.2	6,400	0.88	C	0.3	
BART												
Transbay	16,100	1.53	F	27,900	1.42	E	0.5	21,900	1.12	D	0.6	
Westbay	7,700	1.10	D	10,100	1.06	D	0.5	10,200	1.07	D	0.5	
AC Transit	9,100	0.94	C	10,500	1.08	D	0.4	11,300	1.16	D	0.4	
GGT Bus	5,300	1.00	C	8,500	0.91	C	0.5	6,800	0.73	B	0.6	
GGT Ferry	800	0.57	B	1,500	0.38	A	0.4	1,100	0.28	A	0.6	
Tiburon Ferry	200	0.40	A	300	0.60	B	0.4	200	0.40	A	0.6	
SamTrans	1,900	1.12	D	3,100	1.19	D	0.5	2,300	0.88	C	0.6	
CalTrain (SPRR)	3,100	0.61	B	4,900	0.79	C	0.5	3,800	0.61	B	0.7	
P.M. Peak Period												
Muni												
Northeast	12,600	1.06	D	15,500	0.95	C	0.6	15,200	0.93	C	0.6	
Northwest	13,100	1.13	D	15,300	1.05	D	0.8	20,600	1.41	E	0.6	
Southwest	23,300	1.31	E	28,700	1.29	E	0.5	29,800	1.34	E	0.4	
Southeast	9,100	1.00	C	12,100	0.88	C	0.3	11,000	0.80	C	0.3	
BART												
Transbay	25,800	1.54	F	44,100	1.40	E	0.5	35,200	1.12	D	0.6	
Westbay	11,300	0.80	C	14,600	0.77	C	0.5	15,400	0.81	C	0.5	
AC Transit	14,000	0.95	C	17,000	1.16	D	0.4	17,500	1.19	D	0.4	
GGT Bus	7,600	0.90	C	12,200	0.81	C	0.5	10,000	0.67	B	0.6	
GGT Ferry	1,000	0.56	B	1,700	0.33	A	0.5	1,500	0.29	A	0.5	
Tiburon Ferry	300	0.60	B	500	1.00	C	0.5	400	0.80	C	0.5	
SamTrans	2,900	1.12	D	4,500	1.15	D	0.5	3,600	0.92	C	0.6	
CalTrain (SPRR)	4,500	0.68	B	6,200	0.77	C	0.5	5,500	0.68	B	0.6	

/a/ Passengers per Seat is the ratio of total demand to seated capacity.

/b/ Level Of Service is scale ranging from A to F that relates P/S ratios to passenger loading conditions on transit vehicles (see Table D-2, Appendix D).

/c/ The percent of demand generated by the project.

SOURCE: Environmental Science Associates, Inc. and DKS Associates

in the City must remain on the transit vehicle until crossing the County line before departing). By its very nature, express service to San Francisco provided by transit agencies means that there are limited opportunities for riders to board and depart outside of San Francisco (e.g., most express service has a very limited service area where local service is provided). Consequently, the majority of riders on transit vehicles providing express service to San Francisco are destined for San Francisco. Increased commercial development in areas between the origins of the express routes and San Francisco has little effect on the ridership patterns of the express service since persons wishing to use transit to reach such new areas of commercial development would use local transit service or express service directed to the new development, not express service to San Francisco. Although the service provided by SPRR/CalTrain to and from San Francisco is a mixture of local and express service, the system functions similar to and has ridership characteristics similar to the express bus service to and from the City.

The Level of Service concept, similar to that developed for highway operations, has been applied to both bus and rail transit. Passengers per seat (i.e., total passengers divided by the number of seats) has been used as the measure of effectiveness to define the various level of service ranges. Table D-2, Appendix D, p. A-45 shows the relationship between Level of Service and passengers-per-seat (P/S) ratios for bus transit systems.

Passengers-per-seat ratios are only one measure of adequacy of service. The constraints of operating on heavily-used streets in and around the downtown cause transit-vehicle bunching, loss of running time and missed schedules, all of which reduce service, reliability, and ultimately, capacity. In some respects, this would not be evident from simple quantitative analysis. The data in Table 8, p. 118 is taken from observed operations, not scheduled service, which inherently incorporates the reductions in capacity from operational considerations. In addition to these inefficiencies inherent within the transportation system, there are other factors which would affect overall transit capacities. These include variability in daily and seasonal ridership for which an absolute capacity must be available, as well as transit riders who remain uncouned because their transit trips both start and end beyond the screenlines used in this analysis. Daily fluctuations in fleet availability also affect system capacity.

During the p.m. peak hour in 1984, all of the transit agencies were found to be operating in Level of Service D or better, with the exception of BART Transbay where conditions were found to be at Level of Service F, and Muni in the northwest and southwest corridors, where operations were found to be in Level of Service E.

P.m. peak-period conditions on transit in 1984 were found to be equivalent to or better than peak-hour conditions. In some cases, where demand remains at peak-hour levels during the two-hour period, the passengers-per-seat ratios in the two-hour period are higher than in the one-hour period. This anomaly is the result of transit agencies' providing express (or additional) service during the peak hour, but not during the entire peak period. An example of this type of operation may be seen on BART, where three extra trains operate in transbay service in the peak hour but not in the rest of the peak period. Another factor involved is the distribution of demand (ridership) at uniformly high levels over the peak-period.

Both transit demand and capacity have been assumed to increase during the period 1984 to 2000. The discussions of transit capacity increases for the agencies are based on the Five-Year Plans and Capital Improvement Plans of the various transit agencies; they appear in Appendix J of the Downtown Plan EIR, pp. J.25-26. This material, which is discussed below and summarized in Table 8, is incorporated by reference. The future capacities were developed by applying percentage increases, expected in the future, to observed existing capacity. Thus, to the extent that the existing conditions contain (through the use of observed operations) inherent capacity reduction for missed runs, the future capacity projections have taken into account the inabilities of the transit systems to provide 100% of scheduled capacity.

Future transit demand and loadings for the Downtown Plan in the year 2000 and for 1984-plus-the-Cumulative-List condition are shown in Table 8 for both the peak hour and the peak period. The total transit demand from the project would represent about 0.5% of the total travel demand on the transit carriers in the year 2000.

Peak-hour transit demand on Muni in the year 2000 would increase about 25% over 1984 levels in the northeast, northwest and southwest corridors. Muni demand in the southeast corridor would increase about 40% between 1984 and 2000. Peak-hour demand on the other agencies would increase between 30% and 70% during the period 1984 to 2000.

Peak-period increases in demand would be between 15% and 70% from 1984 to 2000. Overall peak-period transit travel would be expected to increase about 30% between 1984 and 2000. Peak-hour and peak-period passenger demand would be higher than in 1984, although most systems would operate in acceptable conditions (Level of Service D or better) as a result of service improvements. However, BART Transbay and Muni to the southwest would be in Level of Service E during the peak hour and the peak period.

Although the data in Table 8 are calculated on the basis of projections for the Downtown Plan, similar conditions would be expected under the five Alternatives in the Downtown Plan EIR. As shown in Table 7, p. 114, total transit demand under Alternative 1 would be about 12% higher than under the Downtown Plan while transit demand from Alternative 4 would be about 9% lower than the Plan. As noted previously, these differences would not be statistically significant. In terms of Level of Service, the Downtown Plan would be equivalent to the five Alternatives.

It is important to note that the Five-Year Plan improvements for the transit systems are designed both to provide for future demand increases, and to improve service levels from existing conditions. For new vehicles to expand system capacity rather than represent replacement on a one-to-one basis, operating revenues would similarly need to be increased. During the year 2000 peak hour, Muni service to the southwest would exceed the desirable passenger per seat ratio of 1.25./19/ Although the transit demand in the corridor in excess of desirable loadings would be able to be accommodated under crowded conditions and thus would not be excess demand (that is, not beyond capacity), demand in excess of the desirable loadings would mean that additional transit service over that assumed to occur by 2000 would need to be provided to allow transit operations in the corridor to meet the goals set by Muni. To meet the goal of 1.25 passengers per seat in the peak hour, Muni would have to increase service by about 14% in the southwest corridor over the amount of service assumed to occur in 2000.

If transit service were not increased beyond the amounts assumed to occur by the year 2000 in the Downtown Plan EIR, transit operations (in terms of passenger comfort) in the majority of transit corridors would be slightly better than 1984 conditions. Peak-hour and peak-period passengers-per-seat ratios would be lower than 1984 ratios, since service (in some corridors) has been assumed to increase as much as 80% between 1984 and 2000.

If the Downtown Plan's goals regarding increased transit use were achieved, and the proposals in the Plan regarding transit service improvements were to be fully developed and in place, the impacts on transit agencies would be less than described above. If the goals were achieved, transit agencies would experience greater levels of demand than under this analysis but overall passenger loadings would be lower (and within desirable levels) because of increased transit service availability that would come about if the proposals stated in the Plan are developed. Section V.E (Mitigation Measures) of the Downtown Plan EIR contains measures that would provide the additional transit service required to mitigate the above impacts.

Also shown in Table 8, p. 118 is an independent analysis of the conditions that would result from adding the travel from the cumulative list to the 1984 base data, as is specified in the September 1983 Transportation Guidelines. As noted on pp. 112-116, the estimates calculated by adding the travel from the cumulative list to the 1984 base data are not specifically comparable to those from the Downtown Plan EIR method. The project travel would represent about 0.6% of the total travel on transit in the 1984-plus-the-Cumulative-List condition. Under the 1984-plus-the-Cumulative-List conditions, Muni would not meet its service goals in the northwest and southwest corridors; this would require additional service increases of 27% and 20%, respectively, to meet Muni's goal of 1.25 passengers per seat in the peak hour. The other transit agencies would meet their service goals under these conditions.

Local Intersection Traffic

Future traffic operations at intersections in the project vicinity are shown in Table 9, p. 123. For the year 2000 projections, 1984 traffic volumes were increased by a 19% average growth factor based on the Downtown Plan EIR traffic analysis. The growth factor represents a worst-case, unrestrained auto demand condition for street traffic in the downtown and, as such, is probably higher than actual traffic growth may be in the future in the downtown. The Downtown Plan EIR projections included growth at the Hills Plaza site, but did not assign site traffic to specific turn volumes. Therefore, the average growth was compared with traffic which the project would add at specific locations. The greater traffic increase was used at each location to provide a conservative estimate of future traffic volumes. Intersection operations in the project vicinity would still be acceptable even with future traffic growth.

TABLE 9: PROJECTED PEAK-HOUR INTERSECTION VOLUME-TO-CAPACITY RATIOS (V/C) AND LEVELS OF SERVICE (LOS)/a/

<u>Intersection</u>	<u>1984</u>		<u>1984 PLUS PROJECT</u>		<u>2000</u>		<u>1984 PLUS CUMULATIVE LIST</u>	
	<u>V/C</u>	<u>LOS</u>	<u>V/C</u>	<u>LOS</u>	<u>V/C</u>	<u>LOS</u>	<u>V/C</u>	<u>LOS</u>
Spear & Folsom/b/	0.14	A	0.14	A	0.16	A	0.14	A
Spear & Harrison/b/	0.28	A	0.33	A	0.36	A	0.37	A
Folsom & Embarcadero/b/	0.43	A	0.43	A	0.51	A	0.44	A
Steuart & Harrison & Embarcadero/b/	0.60	B	0.60	B	0.72	C	0.63	B
Mission & Beale Sts.	0.92	E	0.92	E	1.05	F	1.10	F
First & Harrison Sts.	1.11	F	1.12	F	1.34	F	1.35	F

/a/ Level of Service descriptions and relationship to V/C ratios are shown in Table D-3, Appendix D of this report.

/b/ Based on counts made on Friday, June 25, 1982, and Thursday, July 21, 1983, by DKS Associates.

SOURCE: DKS Associates and Environmental Science Associates, Inc.

The service levels shown in Table 9 are calculated on the basis of the existing street system. Proposed street changes in the area would have substantial impacts on traffic operations. Under the proposed Rincon Hill Plan, Spear St. would be two-way with one travel lane in each direction and no loading docks or angle parking. A two-way Spear St. would allow project traffic to exit either north or south from the garage and would reduce project impacts on the intersection of Spear and Harrison Sts. Reconstruction of the Embarcadero along the Steuart St. alignment adjacent to Hills Plaza would eliminate the intersection of Steuart and Harrison Sts. The proposed Muni Metro extension, should it be on the surface in front of the project, would reduce the amount of time available for movement of vehicular traffic on Folsom St. and Harrison St. through the intersection with The Embarcadero, as the transit vehicles would have priority status.

Freeway On-Ramp Intersection Traffic

Traffic operations at intersections near freeway ramps serving the project site vicinity are shown in Table 9, p. 123. The intersections of Mission and Beale Sts. and First and Harrison Sts. are at Level of Service E and F, respectively, during the p.m. peak hour. Level of Service descriptions are shown in Table D-3, Appendix D, p. A-50. Peak-hour conditions would be expected to deteriorate at both of the intersections by the year 2000. Expanded areas of traffic congestion would disrupt surface Muni operations.

As shown in Table 9, p. 123, the list-based analysis yields worse Level of Service intersection conditions than those for the year 2000. While similar to the Downtown Plan EIR results, the list-based results are not comparable for the reasons stated earlier.

Regional Freeway Traffic

Analysis of traffic conditions at the regional screenlines has been conducted for both the p.m. peak hour and the two-hour p.m. peak period. A.m. peak traffic conditions at the regional screenlines have the effect of metering the amount of traffic that reaches the downtown from outside of the City. P.m. conditions are usually most severe on both freeways and streets within San Francisco, whereas a.m. peak conditions are most severe at locations outside of the City. This analysis has therefore considered p.m. peak conditions as most critical to the quality of flow on downtown streets.

The regional freeway system that serves San Francisco is an extensive network of roadways that also provides service to most of the major urban centers in the Bay Area. Consequently, there are many areas of commute-related congestion, some of which may experience worse conditions than at the screenlines analyzed in the Downtown Plan EIR and in this document. As noted in the Downtown Plan EIR, the screenlines were selected on the basis of their relationship to travel leaving San Francisco and thus, by their definitions, the screenlines are points of maximum effect of travel from San Francisco; at points further removed from the screenlines, San Francisco travel would be a lesser percentage of the total and thus the overall effects of San Francisco travel would be less than at the screenlines.

Traffic demands at the regional screenlines in 1984 (see Table 10, p. 126) during the p.m. peak hour were found to use between 90% and 100% of the available capacity on the freeways and bridges. Although the eastbound capacity of the Bay Bridge is calculated to be 9,000 vehicles per hour (vph), the 1984 peak-hour volume shown in Table 10 represents the effective eastbound capacity. The volume figures shown in Table 10 for 1984 for the one-hour and two-hour periods are averages of several days; thus, values for individual days may be different from the average.

Peak-hour freeway operating conditions in 1984 were found to be generally in Level of Service D to E conditions, which would indicate unstable flows in the 35 mph to 45 mph range. Table D-4, p. A-51, Appendix D, shows the Level of Service for freeway operations. Peak-of-the-peak conditions within the peak hour were found to be worse than the hourly conditions because of surges in traffic demand during the peak hour. Conditions during the peak period at the screenlines were found to be similar to those experienced during the peak hour.

As shown in Table 10, p. 126, demand during the peak hour in the East Bay and Peninsula corridors would be expected to increase about 15% between 1984 and 2000. Peak-hour demand in the North Bay corridor would increase by about six percent between 1984 and 2000. The project travel demand, about 180 p.m. peak-hour and 280 p.m. peak-period outbound vehicle trip-ends, would represent about 0.3% of the total demand in each corridor in the year 2000. Both the East Bay and Peninsula corridors would have excess peak-hour demand that would not be met during the peak period.^{20/} The North Bay corridor would have excess demand in the peak period. Excess auto demand would result in either a spreading of the demand into the hours adjacent to the peak period or in

TABLE 10: OUTBOUND REGIONAL AUTO DEMAND

<u>Regional Auto Corridor</u> <u>P.M. Peak Hour</u>	<u>Capacity/a/</u>	<u>Volume/b/</u>	<u>2000</u>		<u>1984 + CUMULATIVE LIST</u>	
			<u>Demand</u>	<u>Project Percent</u>	<u>Demand</u>	<u>Project Percent</u>
Bay Bridge (I-80)	9,000	8,540	9,790	0.3	9,480	0.3
Golden Gate Bridge (US-101)	7,200	6,740	7,150	0.3	7,100	0.3
US-101 (south of Harney Way)	8,000	7,390	8,400	0.2	7,800	0.2
I-280 (between Alemany Blvd. and San Jose Avenue)	8,000	7,610	8,650	0.2	8,020	0.2
<u>P.M. Peak Period</u>						
Bay Bridge (I-80)	18,000	17,880	19,330	0.2	18,460	0.2
Golden Gate Bridge (US-101)	14,400	13,870	14,850	0.2	15,380	0.2
US-101 (south of Harney Way)	16,000	14,200	16,530	0.2	14,870	0.2
I-280 (between Alemany Blvd. and San Jose Avenue)	16,000	13,620	15,890	0.2	17,290	0.1

/a/ Although the capacity of the Bay Bridge is calculated to be 9,000 vehicles per hour (vph), the 1984 peak-hour volume shown above represents the effective capacity.

/b/ The volumes for 1984 for the one-hour and two-hour periods are averages of several days and, thus, values for individual days may be different than the average.

SOURCE: Environmental Science Associates, Inc. and DKS Associates

increased transit and ridesharing use should additional transit service (beyond that assumed to occur by the year 2000) or ridesharing incentives be provided.

Operating conditions at the regional screenlines would be at or near capacity in Level of Service E. Traffic flow conditions would be expected to be very unstable and could experience temporary flow interruptions throughout the peak-period. Peak-of-the-peak conditions would be prevalent during the peak hour and might extend into the peak period. The overall two-hour commute period would not be expected to increase substantially in the future. Rather, the occurrence of peak-of-the-peak conditions, now less than one hour, would most likely expand to fill the one-hour peak.

As shown in Table 10, the list-based cumulative analysis, while not comparable to the year 2000 data, produces similar estimates of future demand. The project would represent about 0.3% of the regional auto demand in this condition. The Bay Bridge and I-280 would have excess demand during the peak hour; the Bay Bridge, the Golden Gate Bridge, and I-280 would have excess demand during the peak period. The same conclusions noted above regarding future operating conditions would apply to this condition as well.

Although the traffic data shown in Table 10, p. 126, and used to calculate the v/c ratios in Table 9, p. 123 are calculated on the basis of projections for the Downtown Plan, similar traffic data would be expected under the five Alternatives in the Downtown Plan EIR. As shown in Table 7, p. 114, regional traffic demand under Alternative 1 would be about 34% higher than under the Downtown Plan while regional traffic demand from Alternative 4 would be about 13% lower than under the Plan. In terms of Level of Service, the Alternatives would be equivalent to the Downtown Plan.

OFF-STREET PARKING AND LOADING REQUIREMENTS AND DEMAND

Parking

On May 21, 1960, the San Francisco City Planning Code established parking requirements for all new construction or changes in use. Existing lawful uses that did not meet the Code parking requirements were allowed to continue to provide their existing levels of parking.

Table 11, p. 129 shows the parking requirement at the Hills Plaza site based on the current City Planning Code standards and the total proposed land uses at the site. Under the provisions of the City Planning Code, the Hills Plaza project would require 1,179 total spaces (not including lawful deficiency). The City Planning Code would have required the provision of about 208 parking spaces for the existing uses in the landmark building; however, only four spaces were actually provided on-site to serve the landmark building.^{/21/} Thus, the lawful parking deficiency is 208 spaces required, less the four spaces provided, or 204 spaces. The 204-space lawful parking deficiency is subtracted from the total parking requirement of the proposed uses at the site to determine the net parking requirement. Therefore, the City Planning Code would require the provision of 975 spaces for the Hills Plaza project once the lawful deficiency has been taken into account. This requirement is more than 50% higher than the estimated demand. One reason for the difference is, as stated on p. 101, that the Hills Plaza project is expected to have travel patterns similar to uses in the C-3 District; those travel patterns have a much lower incidence of auto use (and parking demand) than do existing travel patterns in the Hills Plaza vicinity.

The proposed parking requirements contained in the implementing ordinance of the Rincon Hill Plan are more lenient than those in the existing City Planning Code, in recognition of the proximity of the site to downtown and new transit routes proposed for the area. The two proposed changes in the Rincon Hill Plan which affect the Hills Plaza project are 1) the change in the residential parking requirements to permit a range of from one space per four dwelling units to a maximum of one space per unit (compared to the current requirement of one space per unit), and 2) the reduction in the parking requirement to one space per 1,000 sq. ft. of gross floor area of commercial uses in the Commercial/Industrial subarea (compared to the current requirement of one space per 500 gross sq. ft.).^{/12/} The Rincon Hill Plan parking requirements also differ from the existing City Planning Code by being based on gross, as opposed to occupied, floor area. The proposed Rincon Hill Plan implementing ordinance would require the provision of a total of 648 spaces for Hill's Plaza (not including the existing lawful parking deficiency). A net requirement of 488 parking spaces would have to be provided for the existing and proposed office, retail, and residential uses once the lawful deficiency, revised according to the Rincon Hill Plan parking requirements, is included. Table 11 provides a comparison of the parking required for proposed Hills Plaza land uses.

TABLE 11: COMPARISON OF PARKING REQUIREMENTS FOR THE PROJECT

<u>Land Use</u>	<u>Existing City Planning Code/a/</u>	<u>Rincon Hill Plan/b/</u>
Office	998	587
Retail	96	40
Residential	85	21
Existing Lawful Deficiency	<u>- 204</u>	<u>- 160</u>
TOTAL	975	488

/a/ Based on occupied floor area approximately equal to 85% of the gross floor area (Joe Erway, CEDEVCO, telephone conversation, July 19, 1984).

/b/ Based on gross floor area per the proposed requirements of the Rincon Hill Plan (June 1984).

SOURCE: DKS Associates, and the Department of City Planning

The basement garage on the Hills Plaza site would provide 410 spaces on two levels, 85 of which would be reserved for use by the residents of the project. Of the 410 space total, about 90 spaces would be designated for compact vehicles. Section 154 of the City Planning Code would permit a maximum of 204 compact spaces out of a total of 410 on site. The proposed number of compact parking spaces would therefore be in compliance with the Code. However, the total parking supply (410 spaces) would represent an on-site deficit of 565 spaces from the requirements of the Planning Code, and an on-site deficit of 78 spaces from the requirements in the proposed implementing ordinance of the Rincon Hill Plan (see Table 11, above).

The proposed garage would provide 210 fewer spaces than the estimated project parking demand (620 spaces). The proposed parking provisions would accommodate all of the residential and short-term parking demand, but not all of the long-term parking demand. The excess long-term demand could be accommodated several ways. Vehicles associated with the project could park off-site either on-street or in off-street facilities. For example, the proposed intercept parking lots south of Harrison St. could accommodate the excess parking demand from the project./22/ The project sponsor could contribute in-lieu fees to cover the provision of nearby off-site parking spaces (see Mitigation

Measures, p. 170). Alternatively, the on-site parking deficit could be a contributing cause in changing travel mode choice (modal split), which could increase transit ridership and/or ridesharing to and from the project over that analyzed above.

The project would be in conformance with Objective 1, Policy 3 of the Downtown Transportation Plan (of the Transportation Element of the Master Plan) by locating long-term parking in an area peripheral to the downtown commercial district. Similarly, the project would conform with Objective 1, Policy 2 by providing additional short-term parking peripheral to the downtown core. The project would conform with Objective 1, Policies 4 and 5 of the Citywide Parking Plan by allocating a portion of the off-street parking in the project for compact automobiles and by providing short-term parking available to the general public. Objective 2, Policy 1 calls for encouragement of "low auto ownership in neighborhoods that are well served by transit and convenient to neighborhood shopping." While the project currently does not conflict with Objective 2, Policy 1, the project, by its provision of the maximum requirement of one space per residential unit, may ultimately conflict with this Policy as the Rincon Hill Plan area becomes fully developed and transit improvements proposed in the Downtown Plan are implemented.

Objective 2 of the Bicycle Plan is to "provide secure and convenient parking facilities for bicycles." The project, in compliance with the Planning Code and in conformance with the Master Plan, would provide at least 21 bicycle parking spaces within the parking garage.

Loading

The applicable off-street freight loading and service vehicle space requirements and guidelines for the Hills Plaza site are set forth in City Planning Code Article 1.5 (Section 152, Table 5). Under the existing Code, the project would require four off-street loading and service vehicle spaces./23/

According to Sections 154 and 155 of the City Planning Code, these four freight loading and service vehicle spaces would have to be independently accessible and completely enclosed within the lot lines. One of the spaces must be a minimum of 25 ft. long with a vertical clearance of 12 ft. The other three spaces must be at least 35 ft. long with a vertical clearance of 14 ft. and all four spaces must be at least ten feet wide.

Amendments to the City Planning Code affecting off-street parking and loading requirements were proposed in June 1984./24/ These changes were proposed to implement Department of City Planning policy as stated in the Downtown Plan and in City Planning Commission Resolution No. 9286. The amendments proposed in June 1984 would have changed the number of required off-street loading and service vehicle spaces at Hills Plaza to six spaces./24/ However, the Department of City Planning released revised Amendments to the City Planning Code in both October and November 1984 for the purpose of instituting Interim Controls and Permanent Controls (under the Downtown Plan)./25/ The October and November 1984 proposed amendments exempt the Hills Plaza site (and all other sites outside the C-3 Districts) from having to provide the greater number of loading spaces. Thus, under the October and November 1984 amendments, the Hills Plaza site would be subject to the existing Planning Code requirements stated above. Resolution No. 9286, which is still in effect, requires six spaces be provided as mitigation for the project's loading demand.

Delivery and loading activities at Hills Plaza would be conducted at a loading and delivery area wholly contained within the proposed new construction that would provide space for six vehicles (see Figure 5, p. 25). One space would be 12 ft. wide by 25 ft. long, three spaces would be 12 ft. wide by 35 ft. long and two spaces would be 10 ft. wide by 20 ft. long for vans. The latter two (van) spaces are substituted for one freight loading space as defined under the June 1984 amendments, and thus the project would provide the equivalent of five freight loading spaces which would exceed the minimum requirement of four spaces under the existing Planning Code.

As shown in Figure 5, p. 25, the loading docks would provide direct access to the freight elevators to the new residential, office and retail space. Access to the landmark building from the loading area would be via the mid-block plaza which would cause conflicts between pedestrians and loading activity in the mid-block plaza. Because the landmark building would be retained and rehabilitated, it would not be feasible to integrate a common loading area for both the landmark building and the new construction. Provision of loading spaces for the landmark building could be provided in the following manner:

- Retention of loading bays on either Spear St. or Steuart St.
- Redesignation of an additional curbside loading space on Harrison St.
- Provision of an enclosed loading area in the landmark building.

The project would conform with Objective 4, Policy 1 of the Downtown Transportation Plan, "require off-street facilities for freight loading and service vehicles in all new developments" and Policy 2, "discourage access to off-street freight loading and service vehicle facilities from transit preferential streets," by concentrating service activity on Spear St. and providing an off-street loading area to serve the new construction on the site.

Loading Demand. Table 12, p. 133, shows total service vehicle travel and average hourly service vehicle demand for the project, based on data published in the Center City Pedestrian Circulation and Goods Movement Study (Wilbur Smith and Associates, September 1980). The project would generate about 125 service vehicle stops per day. Average hourly loading space demand for the project would be about six spaces per hour and peak hourly demand would be about seven spaces. The mix of space and uses in the new construction (370,000 gross sq. ft. office, 40,000 gross sq. ft. retail and 100,000 gross sq. ft. residential) would generate average demand for five loading spaces, and thus the proposed off-street loading area would adequately serve the new construction. The combination of off-street loading to be provided in the new construction and on-street loading at the landmark building would meet the loading demand for the project.

RINCON HILL PLAN

As discussed on p. 39, the project site is within the planning boundaries of the proposed Rincon Hill Plan.^{/12/} On June 22, 1984, the Department of City Planning published the Draft EIR for the Rincon Hill Plan. That document contains analysis of the effects of build-out of the Plan area to a maximum zoning envelope at an unspecified (post-year-2000) future date (see p. 74 of the Rincon Hill Plan Draft EIR). As noted in that document, the full build-out impacts have been analyzed as a post-year-2000 addition to the City-wide impacts analyzed in the Downtown Plan EIR. In the Downtown Plan EIR, travel demand from the Rincon Hill Plan area has been analyzed (as far as the year 2000) in the context of non-C-3 travel.

Because the project site is a part of the Rincon Hill Plan area, the project travel, at a less-specific level of detail than here, has been included in the travel demand analyzed in the Rincon Hill Plan Draft EIR. In terms of total daily trip-making potential, the project represents about 13% of the net new 110,200 daily pte that would be generated by the Plan area at full build-out. The project site represents about 8% to 10% of the land area

TABLE 12: SERVICE VEHICLE TRAVEL ATTRIBUTABLE TO THE PROJECT/a/

<u>Use</u>	<u>Space (GSF)/b/</u>	<u>Daily Stops/ 10,000 sq. ft. of GSF/b/</u>	<u>Daily Stops</u>	<u>Spaces/Hour/ 10,000 sq. ft. of GSF/b/</u>	<u>Average Spaces/ Hour</u>
Office	524,600	2.1	110	0.1	5.2
Retail	40,000	3.0	12	0.2	0.8
Residential	100,000	0.3	<u>3</u>	0.01	<u>0.1</u>
TOTAL			125		6.1

/a/ Service vehicle travel has been included in total travel calculated for the project.

/b/ Gross square feet of floor space including existing space to be retained.

SOURCE: DKS Associates, from Center City Pedestrian Circulation and Goods Movement Study, Wilbur Smith and Associates, 1980.

in the Rincon Hill Plan Area. Because the Rincon Hill Plan proposes a high proportion of residential land use (which has lower trip generation than office/commercial), the project travel demand is not disproportionate in relation to the total travel demand at buildout, of the Plan area. The analysis presented on pp. 101-116 of the Rincon Hill Plan Draft EIR has been conducted for three time periods, the years 1984 and 2000, and an unspecified post-year-2000 time frame. The 1984 and 2000 analyses are similar to the corresponding analyses in this EIR and use the same base data. However, the analysis of the Plan area for the build-out condition for the post-year-2000 time frame has been conducted at a broad level of detail only.

As noted in the Rincon Hill Plan Draft EIR (82.39E, pp. 4, 105, 110 and 115):

"Taking full Plan build-out into account, the Level of Service (LOS) for Muni service to the northwest corridor would be degraded from "D" to "E". All other Muni corridors and regional carriers would not experience a change in LOS from full build-out. Even with programmed service improvements, cumulative development would result in low levels for passenger comfort on BART and Muni, as currently experienced."

"Service levels at critical intersections leading to the regional freeway system would continue to operate at a level of service "F" (jammed conditions). Other streets/intersections would operate at levels of service "D" or better.

"At full build-out (maximum zoning envelope), there would be a demand for approximately 5,700 long-term and 400 short-term commercial parking spaces in all three subareas. Under parking standards in the proposed Plan, approximately 6,900 commercial spaces would be required; this figure includes spaces in the intercept parking facilities proposed by the Plan for Blocks 3766 and 3767...(Nearly two-thirds of the parking for commercial land uses in Rincon Hill would be provided in the large intercept parking lots south of Harrison St.)"

"The pedestrian access improvements proposed in the Plan would be expected to accommodate increased pedestrian circulation associated with full build-out and generally result in unimpeded sidewalk conditions."

"The proposed Plan would be part of increased development in the greater downtown area. This cumulative development, which would increase traffic congestion and the need for additional transit service, has been analyzed in the Downtown Plan Draft Environmental Impact Report (EE81.3) up to the year 2000.... Transportation effects of full Rincon Hill build-out have been assumed to be additive to the 2000 impact analysis since full build-out would not be expected to occur, if at all, until after 2000."/12/

While the analysis in this EIR has been conducted on the basis of the Embarcadero Freeways remaining in place (the removal of the Freeway is the subject of a joint EIR/EIS on the I-280 Transfer Concept Program), the Rincon Hill Plan Draft EIR contains analysis of local conditions, only for the post-year-2000 condition, both with and without removal of the Embarcadero Freeway./13/

NOTES - Transportation, Circulation and Parking

/1/ Construction data are from Dennis Martello, CEDEVCO, letter, April 12, 1984, and telephone conversation, July 9, 1984.

/2/ San Francisco Department of City Planning, Transportation Guidelines for Environmental Impact Review: Transportation Impacts, September 1983. This document describes the procedure used to calculate travel demand from the project. Trip generation rates of 18.1 person trip-ends (pte) per 1,000 gross sq. ft. of office space, 150 pte per 1,000 gross sq. ft. of retail space, 7.5 pte per dwelling unit,

and 6.5 pte per 1,000 gross sq. ft. of industrial space were used to generate travel from the project and from the existing use. The trip generation rates are for independent land uses. When used to generate travel from more than one use on the same site the rates may overestimate total travel to the site since a portion of the travel from each of the land uses may occur between land uses on the site and not leave the site. Such trips are referred to as "linked trips." The calculations for this project have not been discounted to account for linked trips and thus present a "worst-case" scenario. The September 1983 Transportation Guidelines are on file and available for public review at the Office of Environmental Review, 450 McAllister Street, Fifth Floor.

/3/ The percentage of travel occurring in the peak period and the peak hour are from the Transportation Guidelines (see Note /2/, above). Total travel during each of the periods has been adjusted to show only outbound (leaving the downtown area) travel. The outbound travel consists of all of the work-related travel and half of the other (non-work) travel; only 20% of the residential travel has been assumed to be outbound during the evening peak because the majority of travel generated by the residential space at that time would be from residents returning to the project site (i.e., inbound travel).

/4/ San Francisco Department of City Planning, Office of Environmental Review, Environmental Impact Report for The Downtown Plan, EE81.3, certified October 18, 1984. This document is an analysis of projected growth in the C-3 District to the year 2000 under the Downtown Plan and five alternatives. The transportation analysis in the Downtown Plan EIR includes projections of future modal splits for work and other (non-work) travel for the p.m. peak period, p.m. peak hour, and daily time periods. This three volume document is on file with and available for public review at the Department of City Planning, 450 McAllister Street, Fifth Floor.

/5/ Pushkarev and Zupan, Urban Space for Pedestrians, MIT Press, 1975, pp. 85-117.

/6/ Based on observations made on Monday, July 2, 1984, by DKS Associates.

/7/ Anthony Bruzzone, Planner, San Francisco Municipal Railway, meeting, July 11, 1984.

/8/ San Francisco Department of City Planning, January 1983, Transportation, An Element of the Master Plan.

/9/ This deficit-per-ride figure is based upon information provided in: Touche Ross & Co., Transit Impact Development Fee Cost Study, Fiscal Year 1981-82, July 1983, Corrected September 9, 1983, and consultation with Bruce Bernhard, Chief Accountant, San Francisco Municipal Railway, telephone communication, October 11, 1984. The calculation of the peak-period marginal deficit (additional cost per ride minus additional revenue per ride) was done by ESA. The deficit due to the project would be: 780 peak-period trips per day x 252 working days per year x \$0.50 deficit = \$98,280. The cost deficit estimate is based on the assumption that essentially all vehicles are operating at capacity during peak periods and additional riders would require new vehicle trips. During off-peak periods, it was assumed that all vehicles operate with excess capacity, resulting in an average off-peak marginal cost of zero. These cost estimates are appropriate for project costs to Muni of a single office building. Assessments of costs that would result from cumulative development require the inclusion of additional cost factors and may be best projected using average cost data. Muni does not have data that would enable

it to estimate the average cost per passenger trip. It is reasonable to conclude that average costs would be significantly higher than marginal costs.

/10/ Ward Belding, Supervisor, Office of Research, BART, telephone conversations, November 7, 1983 and October 5, 1984. The \$1.06 average deficit per trip is based on all operating costs and revenues for the entire system and is not specific to San Francisco trips. Available data from BART do not enable peak and non-peak-period costs to be differentiated.

/11/ $1,371 \text{ BART trips per day} \times 252 \text{ days/year} \times \$1.06 = 366,222$.

/12/ San Francisco Department of City Planning, Rincon Hill Plan - A Proposal for Citizen Review, June, 1984. San Francisco Department of City Planning, Draft EIR for the Rincon Hill Plan, 82.39E, June 24, 1984. These documents are on file with and available for public review at the Department of City Planning, 450 McAllister St., Fifth Floor, San Francisco, CA.

/13/ California Department of Transportation, I-280 Transfer Concept Program, Working Paper: Subtask 2.2.2, January 28, 1983. The Draft EIR analysis for the I-280 Transfer Concept Program (84.385E, published September 28, 1984) evaluates eight alternatives, only some of which involve removal of the Embarcadero Freeway. Because of the number of alternative scenarios, any one of which or a combination of several may become the recommended alternative, it would be presumptive to include specific analysis of removal of the Embarcadero Freeway in this EIR.

/14/ The Downtown Plan EIR contains about 50 pages of text devoted to the description of transportation impacts in the greater downtown area, as well as an additional 30 pages of text describing transportation mitigation measures. The information in this EIR is not intended to be a comprehensive summary of the transportation analysis in the Downtown Plan EIR, but rather summarizes portions relevant to the project and its contribution to cumulative impacts. For details and assumptions used to arrive at the data and results presented in the Downtown Plan EIR, see Section IV.E, Transportation Setting and Impact, Section V.E, Transportation Mitigation, Appendix J, Transportation and Circulation Analyses and Methodologies, and Volume III, Summary of Comments and Responses, of the Downtown Plan EIR, which are incorporated by reference into this report and summarized in the text as appropriate.

/15/ In 1977, peak average vehicle occupancy westbound on the Bay Bridge was 1.7 persons per vehicle. By 1983, in response to increasing congestion and increased travel and parking costs, peak average vehicle occupancy westbound increased to 2.1 persons per vehicle. Data are from Traffic Survey Series A-48 and MA-60, Spring 1977 and Spring 1983, Metropolitan Transportation Commission.

/16/ The Downtown Plan EIR contains extensive discussion of the methods and results used to forecast future C-3 District land use and employment. Sections IV.B, Land Use and Real Estate Development; IV.C, Business and Employment; IV.D, Residence Patterns and Housing; and Appendices G, Land Use and Real Estate Analysis; H, Business and Employment Analysis; and I, Theoretical Discussion of Housing Market Effects/Methodology for Forecasting Residence Patterns, of the Downtown Plan EIR, which contain detailed information about methods used to forecast future employment in the C-3 District, are incorporated by reference into this report and summarized in the text as appropriate. The employment forecasts in the Downtown Plan EIR for the year 2000 exceed the employment projected using the current list-based cumulative analysis, as the list cannot take into account projects not yet proposed.

/17/ The analysis of historic trends in travel patterns is from the following sources: Metropolitan Transportation Commission, Travel Observations of the Bay Bridge Corridor, October 21, 1981; Homburger and Dock, Trends in Traffic Patterns at the Bay Bridge and Caldecott Tunnel, U.S. Department of Transportation, DOT-BIP-WP-32-3-77, July 1977; telephone survey of 500 drivers conducted in April 1980 by Golden Gate Transit, data supplied by Alan Zahradnik, Transportation Planner, on February 16, 1983; Office of the Auditor-Controller, Comparative Record of Traffic for the Month of November, May 27, 1937 through November 30, 1982, Golden Gate Bridge, Highway and Transportation District; San Francisco Municipal Railway Planning Division, Projections of Future Muni Demand and Vehicle Requirements, October 1982; San Mateo County Transit District, SamTrans Five-Year Transportation Development Plan: 1983-1988, April 1983; California Department of Transportation, CalTrain Caltrans/Southern Pacific Peninsula Train Service Five-Year Plan 1983-1988, July 1983; and traffic volume counts from San Francisco Department of Public Works, Bureau of Engineering, Division of Traffic Engineering and from 1983 San Francisco Cordon Count, JHK and Associates, July 1983.

/18/ See Downtown Plan EIR, pp. II.9-11, for a comparison of the cumulative list projections with the forecasts of the Downtown Plan EIR.

/19/ San Francisco Municipal Railway, Short-Range Transit Plan 1984-1989, June 1984.

/20/ Table IV.E.4, p. IV.E.36, of the Downtown Plan EIR contains discussions of the implications of excess demand at the regional screenlines.

/21/ According to the Department of City Planning, the calculation of lawful parking deficiency for the Hills Plaza site considers only the pre-1960 uses in structures that would be retained on the site (i.e., the landmark building) and the parking spaces provided on-site for these structures (i.e. the four spaces located adjacent to the Annex building that are reserved for mail room personnel).

/22/ San Francisco Department of City Planning, Peripheral Parking Opportunities in the South of Market Area, December 1982.

/23/ The loading requirements calculation has been made on the basis of the amount of gross sq. ft. of gross floor area proposed less the amount of existing floor area (62,400 gross sq. ft. of office space) to be retained.

/24/ San Francisco Department of City Planning, Proposed Amendments to the City Planning Code to Implement the Downtown Plan, June 1984.

/25/ San Francisco Department of City Planning, Proposed Amendments to the City Planning Code to Implement the Downtown Plan, Interim Controls and Proposed Amendments to the City Planning Code, Permanent Controls, October and November 1984.

F. AIR QUALITY

PROJECT AND CUMULATIVE-DEVELOPMENT AIR QUALITY EFFECTS

Upon completion, the project would affect air quality in two ways. Emissions would be generated by project-related traffic, and by combustion of natural gas for building space and water heating. Transportation sources would account for over 95% of project-related emissions.

Projected daily emissions of pollutants in 1990 from project-generated traffic, and from cumulative development traffic (based on the March 10, 1984 list of Cumulative Office Development in Downtown San Francisco), are shown in Table 13, p. 139. Table 13 compares the cumulative list-based emissions projections to emissions projected for C-3 District development by the Downtown Plan EIR (EE81.3, certified October 18, 1984), and to total emissions projected for the entire Bay Area by the 1982 Bay Area Air Quality Plan. The project would contribute about 2% to the total air pollutant emissions generated by cumulative list projects, and about 5% to the total emissions generated by Downtown Plan development, in 1990. Alternative 1 to the Downtown Plan (covered in the Downtown Plan EIR) would generate about 38% more emissions in 2000 (from development between 1990 and 2000) than would the Downtown Plan. Alternative 4 would generate about 7% less emissions than would the Downtown Plan. Emissions generated by Alternatives 2, 3, and 5 would fall within this range. The types of air quality impacts under these alternatives would be the same as those under the Downtown Plan; their magnitudes would vary in proportion to the differences in their emissions.

Motor vehicle trips associated with the project and with cumulative development would emit more nitrogen oxides (NO_x) than hydrocarbons (HC), both of which are chemical precursors of ozone. Emissions from building natural gas combustion would consist primarily of NO_x. On the basis of the LIRAQ (Livermore Regional Air Quality model) regional ozone simulations performed for the 1982 Bay Area Air Quality Plan, incremental NO_x emissions in excess of incremental HC emissions could lead to a decrease in peak ozone concentrations in the Bay Area. This relationship between NO_x and HC emissions would hold both under the cumulative list scenario and the Downtown Plan scenario shown in the table. Thus emissions of HC and NO_x generated by the project and by cumulative development would not increase Bay Area ozone concentrations. If the HC emission reduction strategies adopted in the 1982 Bay Area Air Quality Plan are successful, these concentrations are expected to attain the federal standard by 1987.

TABLE 13: PROJECTED DAILY POLLUTANT EMISSIONS

Pollutant	Emissions (tons per day) /a/					
	Project 1990/b/	Cumulative List 1990/c/	Downtown Plan/d/		Bay Area/e/	
			1990	2000	1990	2000
Hydrocarbons	0.03	1.4	0.6	0.6	428	428
Nitrogen Oxides	0.04	1.8	0.8	0.8	558	610
Carbon Monoxide	0.37	17.0	6.8	6.6	1,952	1,883
Particulates	0.06	2.7	1.1	1.3	562	649
Sulfur Oxides	0.01	0.2	0.1	0.1	194	233

/a/ Project, Cumulative List, and Downtown Plan emissions calculated using BAAQMD, EMFAC6C vehicular emission factors. Emissions of HC, NO_x, and CO include an assumed six minutes of idling time per vehicle trip. Emissions of TSP include dust entrained from roadway surfaces.

/b/ Based upon a weighted daily weighted average of 13.2 miles traveled.

/c/ Incremental emissions of downtown-area development based on list of projected Cumulative Office Development in Downtown San Francisco as of March 10, 1984 (see Appendix C, Table C-2, pp. A-36).

/d/ Incremental emissions of C-3 District development, per The Downtown Plan EIR, Table IV.I.2, p. IV.I.12.

/e/ Cumulative total emissions of Bay Area development, per ABAG, BAAQMD, MTC, 1982 Bay Area Air Quality Plan, pp. 42, 53, and 112.

SOURCE: Environmental Science Associates, Inc.

NO_x emissions would decrease in San Francisco by about 2% from 1984 to 2000, but would increase in the Bay Area by about 5% from 1984 to 2000. It is possible that excess NO_x emissions generated by cumulative development (including the project) could increase ozone and/or nitrogenous oxidant concentrations further downwind, outside the Bay Area. In addition, incremental NO_x emissions generated by cumulative development (including the project) throughout the Bay Area could increase acid rain further downwind, outside the Bay Area to a relatively small extent.

In 1990 and 2000 (according to the Downtown Plan EIR), area-wide traffic volumes in the downtown area would increase by about 8% and 15%, respectively, over 1984 volumes; average traffic speeds would decrease by about one mph and two mph, respectively, from 1984 speeds. However, in 1990 and 2000 the average vehicle is expected to emit 32% and 43%, respectively, less carbon monoxide (CO) than in 1984 due to ongoing state and

federal emissions controls. The projected effects of these controls on new vehicles (and the retirement of older, more polluting vehicles) would more than offset the increases in traffic volumes and traffic congestion due to project and cumulative development.

CO concentrations at 11 intersections in the downtown study area, as analyzed in the Downtown Plan EIR, would decrease from 1984 to 1990 and thereafter to 2000. CO concentrations at 10 of the 11 intersections would be within the state and federal standards in 1990 and 2000 under the Downtown Plan and the Alternatives. CO concentrations at one intersection (Brannan and Sixth Sts.) would continue to exceed the state and federal eight-hour standards both in 1990 and in 2000 under the Downtown Plan and the Alternatives.

Curbside carbon monoxide (CO) concentrations at selected intersections affected by project-generated traffic, and by cumulative development traffic (based both on the March 10, 1984 cumulative list and on the Downtown Plan EIR growth projections), were projected for worst-case conditions and are compared with the ambient standards in Table 14, p. 141. These projections were calculated using a revised version of the Modified Linear Rollback (MLR) method which was developed for the Downtown Plan EIR.

Currently, the eight-hour CO standard is estimated to be violated at the Steuart/Harrison/The Embarcadero intersection and at the Beale/Mission intersection. CO concentrations are predicted to be less in 1990 and 2000 than in 1984, and would not violate the standards at any intersection analyzed in any of the future scenarios.

Emissions of total suspended particulates (TSP) generated by the project and cumulative development would increase TSP concentrations, which could increase the frequency of TSP standard violations in San Francisco, with concomitant health effects and reduced visibility.

Emissions of sulfur oxides (SO_x) generated by the project and by cumulative development would not bring San Francisco's sulfur dioxide (SO₂) concentrations measurably closer to violating the standard.

The project, and other downtown development on the cumulative list or under the Downtown Plan, would not conflict with the pollution reduction strategies recommended by the 1982 Bay Area Air Quality Plan. These strategies consist primarily of HC and CO

TABLE 14: EXISTING AND PROJECTED CURBSIDE CARBON MONOXIDE CONCENTRATIONS AT SELECTED INTERSECTIONS

Intersection	Averaging Time	Concentrations (ppm)/a/				
		1984	1984 + Project	Cumulative List 1990/b/	Downtown Plan/c/ 1990	2000
Spear & Folsom	1-hour	8.4	8.5	6.7	6.7	6.4
	8-hour	6.5	6.5	5.0	5.0	4.7
Spear & Harrison	1-hour	8.7	8.9	7.0	7.1	6.7
	8-hour	6.7	6.9	5.3	5.3	4.9
Folsom & The Embarcadero	1-hour	11.4	11.4	8.7	8.8	8.3
	8-hour	8.8	8.8	6.7	6.8	6.3
Steuart & Harrison & The Embarcadero	1-hour	11.7	11.7	8.8	9.0	8.0
	8-hour	<u>9.4</u>	<u>9.5</u>	7.1	7.1	6.6
Mission & Beale	1-hour	13.4	13.4	9.5	10.1	8.6
	8-hour	<u>9.8</u>	<u>9.8</u>	7.9	7.5	7.0
First & Harrison	1-hour	10.9	11.0	8.6	8.5	8.1
	8-hour	8.4	8.4	6.5	6.5	6.1

/a/ Calculations for all scenarios were made using a revised version of the Modified Linear Rollback (MLR) method described in the Downtown Plan EIR. Background concentrations were calculated to be 7.4 ppm for one hour and 5.7 ppm for eight hours in 1984, 6.0 ppm for one hour and 4.5 ppm for eight hours in 1990, and 5.7 ppm for one hour and 4.1 ppm for eight hours in 2000. Underlined values are in excess of the state or federal CO standards. The one-hour state standard is 20 ppm, the one-hour federal standard is 35 ppm, and the eight-hour state and federal standards are 9 ppm.

/b/ Based on the list of projected Cumulative Office Development in Downtown San Francisco as of March 10, 1984 (see Appendix C, Table C-2, p. A-36).

/c/ Based on the growth projection methodology contained in the Downtown Plan EIR, Table IV.I.3, p. C&R-I.8.

SOURCE: Environmental Science Associates, Inc.

emission controls on stationary sources and motor vehicles, and transportation improvements, and are aimed at attaining the federal ozone and CO standards. As discussed above, emissions associated with the project and with cumulative downtown development are not projected by this EIR or the Downtown Plan EIR to increase ozone concentrations, and thus would not conflict with the objectives of the

1982 Bay Area Air Quality Plan regarding ozone. Cumulative downtown development is projected by the Downtown Plan EIR potentially to result in a violation of the eight-hour CO standard at the Brannan/Sixth intersection analyzed therein. The model used to make the CO projections might not be accurate to within the percentages of the excesses. Therefore, until additional "hotspot" monitoring is performed to validate the model projections, a determination of whether cumulative downtown development would conflict with objectives of the 1982 Bay Area Air Quality Plan regarding CO cannot be made.

RINCON HILL PLAN

As stated on p. 132 of Section IV.E., Transportation, Circulation and Parking, the project, at a less-specific level of detail than here, has been included in the analysis of the Rincon Hill Plan Draft EIR (see pp. 117-129 of the Rincon Hill Plan Draft EIR). That analysis considers air quality effects of buildout of the Rincon Hill Plan area for a maximum zoning envelope at an unspecified (post-year-2000) future date, and includes the project at a non-specific level of detail. The air quality analysis contained in the Rincon Hill Plan EIR presents a worst-case impact analysis, by evaluating the impact of full buildout-generated emissions as a separate addition to emission levels from cumulative growth forecasted for the year 2000 in the Downtown Plan EIR. Emissions from full buildout of the Rincon Hill Plan would not violate any air quality standards. The project would represent about 9% (in year-2000) of those pollutant emissions.

CUMULATIVE LIST AND DOWNTOWN PLAN METHODOLOGIES

The pollutant emissions and CO concentrations shown in Tables 13 and 14 were projected for 1990 on the basis of two different sets of future growth assumptions, with differing results. In one case, a list of specific projects proposed, approved, and under construction was used (see Appendix C, Table C-2, p. A-36). In the other case the employment growth trend approach of the Downtown Plan EIR was used, and those projections presented. In both cases, the method for the air quality analyses was identical. However, the results using projected cumulative development are not directly comparable with those from the Downtown Plan EIR for several reasons.

First, it is reasonable to assume that the projected cumulative development on the list would be completed and occupied sometime between 1990 and 2000, rather than

in either of those two analysis years which were used in the Downtown Plan EIR. The pollutant emissions and CO concentrations were calculated for 1990 using the cumulative list, even though those projects are not expected to be completed until the mid-1990s, in order to provide a comparison with the Downtown Plan EIR results. However, this has the effect of artificially increasing the cumulative list results, because average-vehicle emission rates will decline with time, as a result of state and federal controls.

Second, the transportation analysis used for the Downtown Plan EIR differs from that used for the cumulative list, as described in the Transportation section of this report (pp. 112-116). Briefly, these differences include the fact that a cumulative-list based analysis assumes the same proportion of new employees would commute by private auto as is currently the case. In contrast, the Downtown Plan EIR analysis projects a shift of commuters from driving alone to carpool and transit, because commute routes such as the Bay Bridge are already at or near capacity and could not accommodate all of the vehicles that would be used if the proportion of persons driving alone to work remained constant.

Other reasons for the differences include the use in the cumulative list analysis of a constant regional distribution of trips, whereas the Downtown Plan EIR forecasts a declining percentage of new employees residing in San Francisco, and the lack in the cumulative list approach of discounting factors to account for trips between individual projects within the Downtown. Also the cumulative list applies to the entire downtown area, a larger geographical area than that analyzed in the Downtown Plan EIR, which applies to the C-3 District only.

Thus, total (regional) vehicle miles traveled and the resulting pollutant emissions projected using the cumulative list approach are considered artificially high. On a local intersection basis, traffic volumes and the resulting CO concentrations might or might not be higher with the cumulative list approach, depending on the particular location. This is because the cumulative list method does not distribute traffic on all the same streets in the same proportions as does the Downtown Plan EIR method.

G. ENERGY

Pacific Gas and Electric Company supplies energy to San Francisco customers. Electrical energy is generated from various sources of energy including oil, gas, hydroelectric, geothermal, nuclear, wind, cogeneration and solid waste./1/ In future years PG&E expects to generate electricity from these sources and from coal. The proportion of energy generated from oil and gas is expected to decrease by 1990 with corresponding increases in the proportion of energy generated from the other sources listed above./2/

Annual energy consumption by existing uses on the site, office use and coffee processing, is 5.7 million kWh of electricity and 81.1 million cu. ft. of natural gas, equal to about 95 billion Btu at the source./3,4/

CONSTRUCTION ENERGY

Removal of existing structures would require an unknown amount of energy. Fabrication and transportation of building materials, worker transportation, site development, and building construction would require about 1.2 trillion Btu of gasoline, diesel fuel, natural gas, and electricity./5/ Distributed over the estimated 50-year life of the project, this would be about 24 billion Btu per year, or about 26% of annual building energy requirements.

OPERATIONAL ENERGY

New buildings in San Francisco are required to conform to energy conservation standards specified by Title 24 of the California Administrative Code. The State allows building developers to comply with the standards through the component performance standards method which requires the incorporation of a set of specific design features, through the use of nondepletable energy resources, or by demonstrating that the building would consume no more than a specified quantity of energy, expressed as Btu's per square foot per year (energy budget)./6/ Documentation showing compliance with these standards is submitted with the application for the building permit and is enforced by the Bureau of Building Inspection.

Proposed Energy Budget

Initial calculations indicated that the commercial (office and retail) portion of the project would require about 140,000 Btu per sq. ft. annually, about seven percent in excess

of the performance standards in Title 24 of the California Administrative Code, which would be 131,000 Btu per sq. ft. for the project. The project engineers believe, however, that design refinement now in progress, such as adjusting the location and amount of glass, and determining the type of HVAC system and components, would improve the project's energy efficiency so that it would meet the performance standard./7/ Peak fossil fuel consumption would be about 13 million Btu per hour of natural gas. Table 15, p. 146, shows the estimated project energy use.

Project operations would consume electricity primarily for lighting and air conditioning. About 8.1 million kWh, or about 94%, would be consumed by retail and office uses, and about 0.49 million kWh, or about six percent, would be consumed by residential uses.

Monthly electricity use would range from about 887,000 kWh in August to about 570,000 kWh in May. Peak electricity demand for the commercial space would be about 4,300 kW and would occur at 5:00 p.m. in June, while peak electricity demand for the residential space would be about 180 kW and would occur on January mornings. Project demand for electricity during PG&E's peak electrical load periods, July and August afternoons, would be about 4,300 kW, an estimated 0.03% of PG&E's peak load of 16,000 MW./8/ Annual and peak daily electricity consumption are shown in Figure 22, p. 147.

Peak natural gas consumption would be about 30,000 ft.³/day. (about 32 million Btu/day) and would occur at about 8:00 a.m. in December. Project demand for natural gas during PG&E's peak natural gas load periods, January mornings, would be about 30,000 cu. ft. per day, or about 0.0008% of PG&E's peak load of about 3.7 billion Btu per day./8/ Annual and peak daily natural gas consumption is shown in Figure 23, p. 148.

The project would consume about 14% less energy annually than when coffee manufacturing was in full operation at the site. Total energy consumption as a result of the project would be increased, however, as the coffee manufacturing operations currently at the site would be continued at another Hills plant in the City.

Transportation Energy

Project-related transportation would cause additional, off-site energy consumption. For the project trip generation described in the Transportation section, pp. 100-101,

TABLE 15: ESTIMATED PROJECT ENERGY USE/a/

Allowable Under Title 24 Energy Budget

Total annual BTUs/b/ per square foot of office space 126,000 Btu

Total annual BTUs per square foot of retail space 200,000 Btu

Daily Natural Gas Consumption/c/

Estimated daily natural gas consumption per square foot 17 Btu

Estimated peak daily natural gas consumption 127 therms

Monthly Electric Consumption/c/

Estimated monthly electrical consumption per square foot 1.2 kWh (12,285 Btu)

Estimated total monthly electrical consumption 720,000 kWh (7.4 billion Btu)

Annual Consumption

Estimated total annual natural gas consumption 36,850 therms

Estimated total annual electrical consumption 8.6 million kWh (88.5 billion Btu)

Connected kilowatt load 3,700 kilowatts

Estimated total annual energy consumption 92.2 billion Btu (16,464 barrels of oil)

/a/ The project would include 587,000 sq. ft. of office, 40,000 sq. ft. of retail area and 100,000 sq. ft. of residential use. Energy use includes space conditioning, service water heating and lighting in accordance with allowable limits under Title 24. Estimated electricity includes 3.6 kWh/sq. ft./yr. consumed by appliances such as typewriters, computers, coffeemakers, etc., although the Title 24 estimates used for comparison includes only 1.2 kWh/sq. ft./yr.

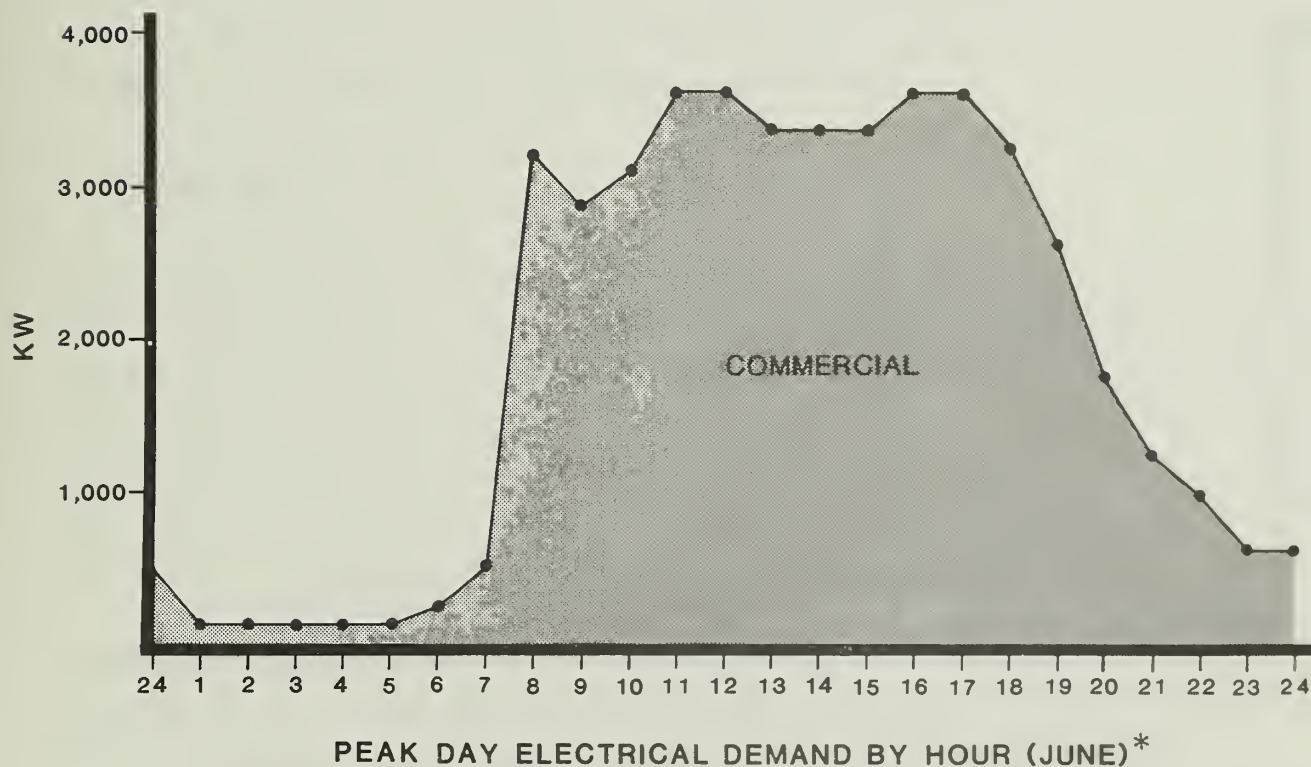
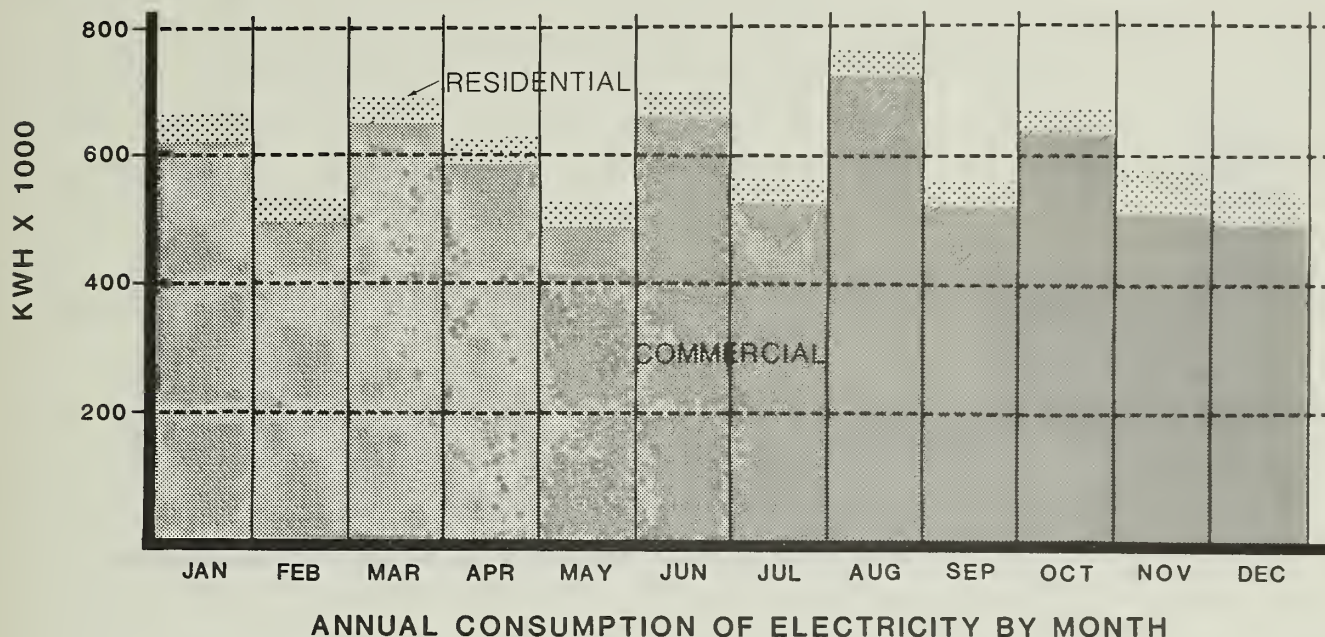
/b/ Btu (British thermal unit): A standard unit for measuring heat. Technically, it is the quantity of heat required to raise the temperature of one pound of water 1° Fahrenheit (251.97 calories) at sea level.

/c/ Electrical and natural gas consumption were calculated for the project by Syska and Hennessy, Inc. These calculations are available for review at the Office of Environmental Review, 450 McAllister St., Fifth Floor, San Francisco, California. An additional 2.4 kWh/sq. ft./yr. of electricity was added to the office portion only (see /a/, above).

NOTE: Energy Conversion Factors:

- one gallon gasoline = 140,000 Btu
- one kilowatt (kw) = 10,239 Btu assuming operational efficiency of 33% for fossil or nuclear fueled power plant
- one therm = 100,000 Btu
- one cubic foot of natural gas = 1,100 Btu at source
- one barrel of oil = 5,600,000 Btu

SOURCE: Syska and Hennessy; Environmental Science Associates Inc.; and Department of City Planning



* Peak day residential use is not shown as it represents a minor portion of the total peak day demand (less than 0.5%)

** These tables only show Title 24 uses, which include 1.2/kWh/sq.ft./yr. Actual uses of electricity presented in the text are about 16% higher.

SOURCE: ESA

FIGURE 22
PROJECTED ELECTRICITY CONSUMPTION

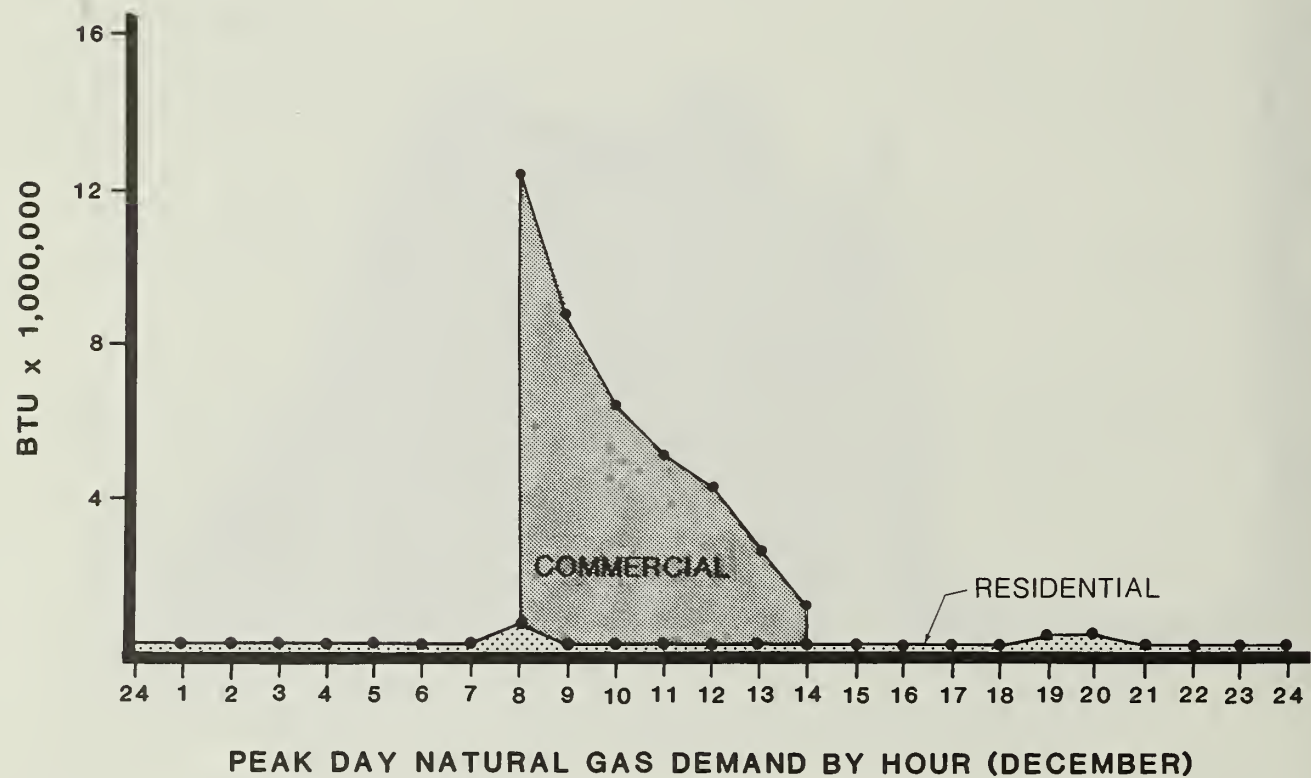
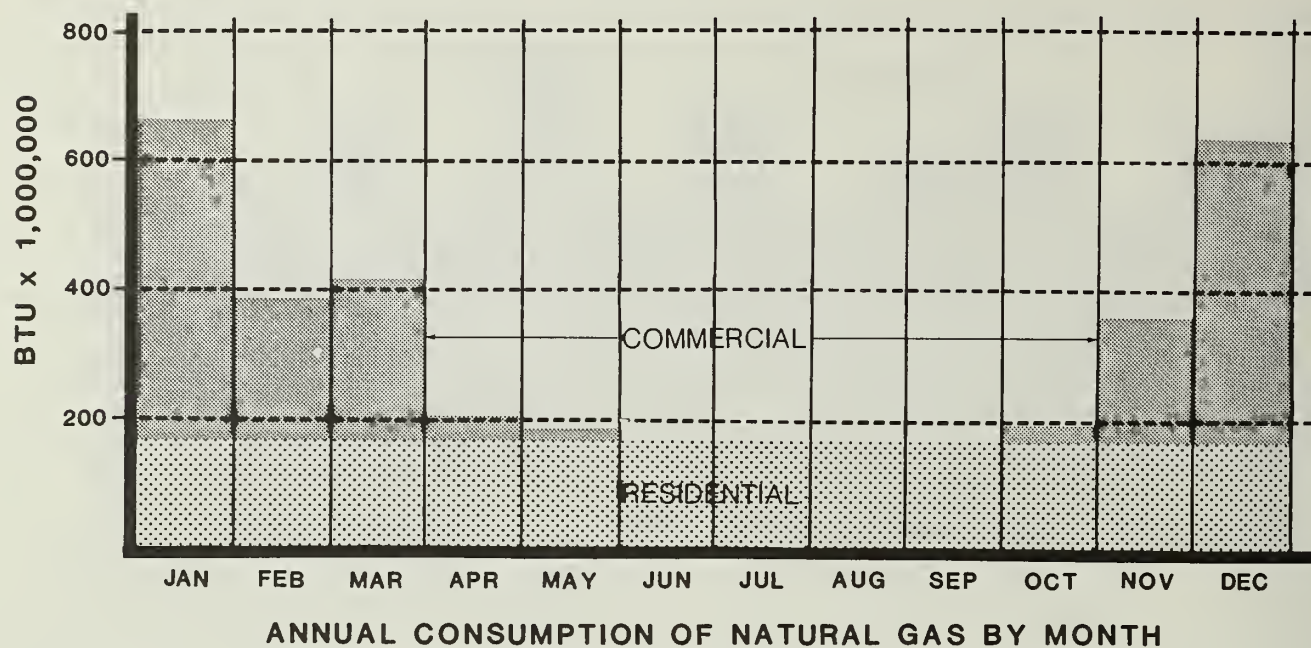


FIGURE 23
PROJECTED NATURAL GAS CONSUMPTION

SOURCE: ESA

project-related trips would require about 720,000 gallons of gasoline and diesel fuel and about 6.1 million kWh of electricity annually. The total annual transportation energy demand, converted with at-source factors to a common thermal energy unit, would be about 168 billion Btu. This projected use is based upon the mix of highway vehicles in California in 1987. Vehicle fuel use is expected to decrease until 1985 as the vehicle fleet becomes more efficient and fuel more expensive.

Energy Policies

In the Energy Policy Component of the Environmental Protection Element of the Comprehensive Plan, Policy 4 under Objective 2 states that development should "encourage use of energy conserving appliances and lighting systems." To respond to Policy 4 of this objective, the project sponsor would install appliances complying with state Efficiency Regulations (Title 20, Chapter 2, California Administrative Code). The project also would address Policy 1 under Objective 4, to "increase the use of transportation alternatives to the automobile." The sponsor has agreed to designate a transportation broker for the project to encourage transit use by project workers and residents. The project would not address Policy 3 of Objective 5, as it would not connect to a district heating system nor would it include cogeneration.

Cumulative Energy Analysis

Based on the March 10, 1984 list of cumulative office development in downtown San Francisco (Appendix C, p. A-32), yearly estimated electrical consumption for the projected 19 million sq. ft. of additional space in downtown would be approximately 340 million kWh of power per year (see Appendix C, Table C-2, p. A-36 for a list of these projects).^{9/} PG&E, in examining its ten-year load growth projections for San Francisco, believes that growth rates of net new office space in the downtown will diminish from the historic figure of 1.5 million sq. ft. per year to between 1 million and 1.2 million sq. ft. per year.^{10/} Total increased energy demand over the next decade would be approximately 200 million kWh of electricity per year, less than projected using the cumulative list.^{11/} The lower PG&E prediction is largely due to its lower estimate of future development.

Projections of electrical use for growth that would occur under the Downtown Plan EIR indicate an increase of about 210 million kWh of electricity per year between 1984 and 1990 as a result of all new development occurring in the C-3 District.

From the period 1984 to 2000, electrical consumption rates would increase by about 330 to 350 million kWh per year, or about 120 to 140 million kWh per year more than between 1984 and 1990./12/ Electric requirements for development that would occur with the alternatives analyzed in the Downtown Plan EIR would increase between 300 through 500 million kWh per year between 1984 and 2000./13/

Natural gas consumption for new office development would be less than current demand, which includes consumption by older, less energy-efficient buildings./9/ On the basis of growth estimates contained in the Downtown Plan EIR, the City Planning Department estimates that, between 1984 and 2000, gas consumption will grow by 470 million cu. ft. (about five million therms) per year of which 210 cu. ft. (about two million therms) per year would be for office uses./12/ Natural gas requirements for development that would occur with the alternatives analyzed in the Downtown Plan EIR would increase between 580 and 810 million cu. ft. (about six to nine million therms) per year between 1984 and 2000./13/

For two reasons, referenced estimates in the Downtown Plan EIR are not directly comparable to those made by applying energy consumption factors to the floor area of projected cumulative development (list method). First, the list-based projections estimate energy demand at the time of full buildout (mid-1990s) rather than during the 1984-1990 and 1990-2000 time periods as in the Downtown Plan EIR. Second, about 75% of the projects on the March 10, 1984 list of projected cumulative office development in downtown San Francisco fall within the C-3 District boundary, which means the list method estimates energy consumption for a larger area than the Downtown Plan EIR. The PG&E projection cannot be compared to the projections in the Downtown Plan EIR because they cover different time periods.

A comparison of the Downtown Plan and PG&E estimates of electricity use between 1990 and 2000 in downtown San Francisco is being prepared by PG&E, to be released in a report later this year. PG&E plans to meet increased San Francisco energy demands to the year 2000 are discussed on pp. IV.G.13-14 of the Downtown Plan EIR, which are hereby incorporated by reference. In summary that material indicates the demand increases in electricity would be met from nuclear sources, oil and gas facilities, hydroelectric and geothermal facilities, and other sources such as cogeneration, wind and imports. PG&E plans to continue receiving most of its natural gas from Canada and Texas under long-term contracts.

NOTES - Energy

/1/ PG&E Annual Report, San Francisco, CA, 1982.

/2/ PG&E Annual Report, San Francisco, CA, 1981.

/3/ Hannon, B. et al, 1978, "Energy and Labor in the Construction Sector," Science 202:837-8470.

/4/ Existing energy use is based on PG&E customer billings for 1983; at-source thermal energy, given in British thermal units (Btu), is based on information received from PG&E, Technical Service Department, May 10, 1984.

/5/ The British thermal unit (Btu) is the quantity of heat required to raise the temperature of one pound of water one degree Fahrenheit at sea level. The term "at-source" means that adjustments have been made in the calculation of the thermal energy equivalent (Btu) for losses in energy that occur during generation, transmission, and distribution of the various energy forms as specified in: ERCDC, 1977, Energy Conservation Design Manual for New Non-Residential Buildings, Energy Conservation and Development Commission, Sacramento, California, and Apostolos, J. A., W. R. Shoemaker, and E. C. Shirley, 1978, Energy and Transportation Systems, California Department of Transportation, Sacramento, California, Project #20-7, Task 8.

/6/ State of California Energy Resources Conservation and Development Commission, Conservation Division, Energy Conservation Design Manual for New Nonresidential Buildings, 1984.

/7/ Mark Redmond, Syska and Hennessy, telephone conversation, May 15, 1984; and Joe E. Erway, CEDEVCO, personal communication, October 5, 1984.

/8/ San Francisco Department of City Planning, Downtown Plan EIR (EE81.3), certified October 18, 1984.

/9/ Energy consumption factors of 18 kWh sq. ft./year and 11 cu. ft./year (about 12,100 BTU) are based on unpublished data of actual building consumption rates supplied by David Rubin, Department of City Planning, personal communication, April 1984, and include base power consumption of the building core (uses covered by Title 24) and power demands of electric office machines (uses not covered by Title 24).

/10/ Ken Austin, Commercial-Industrial Marketing Supervisor, Pacific Gas and Electric Company, letter of March 23, 1984. This letter is available for public review at the Department of City Planning, Office of Environmental Review, 450 McAllister St., 5th floor, San Francisco.

/11/ PG&E's analysis of a typical office building yielded on annual consumption of about 17 kWh per sq. ft. per year which agrees with the City's estimate within the limits of estimation methodology.

/12/ City and County of San Francisco, 1984, Downtown Plan EIR, Volume I, pp. VII.G.1-VII.G.17. The Downtown Plan EIR uses a consumption rate factor of 18 kWh/sq. ft./year from 1984-1990 and 16 kWh/sq. ft./year from 1990-2000. These different factors are due to Title 24 revisions to reduce building energy budgets. These new standards would be reflected by lower electrical consumption in buildings constructed by 1990.

/13/ City and County of San Francisco, 1984, Downtown Plan EIR, Volume I, pp. IV.G.1-IV.G.17, and pp. VII.G.1-VII.G.4.

H. EMPLOYMENT AND HOUSING FACTORS

EMPLOYMENT

Direct Project-Related Employment

The project would accommodate approximately 2,240 permanent full-time jobs, including the existing 175 headquarters employees that would remain on-site (see Table 16, p. 153). The net increase in employment would be 2,065 jobs; this analysis does not include 155 coffee manufacturing jobs which are currently being relocated to the Hills plant at Mariposa and Arkansas Sts. in San Francisco.

Out of the total 587,000 gross sq. ft. of office space, the existing 175 Hills employees would occupy about 75,000 gross sq. ft. in either the landmark building or new construction. No other tenants are secured at this time. Prospective tenants are anticipated to consist mainly of corporate and professional businesses, including those firms that would locate their less space- and labor-intensive operations (data processing and some clerical operation) to South of Market, which is less expensive than the Financial District. Because specific tenants are unknown at this time, the projected total number of employees was derived on the assumption of an average number of square feet per employee, by employment type.

Project construction would require about 570 person-years of labor, an average of about 190 construction jobs over a 36-month construction period.

Indirect (Secondary) Employment

Secondary employment and income would result from the 2,065 net additional permanent employees and the 190 construction jobs accommodated by the project. Through the multiplier effect, each employed person would generate additional employment through expenditures for goods and services. About 880 additional person-years of employment would be generated in the Bay Area as a result of the multiplier effect of project construction./1/ On the assumption that the 2,065 new jobs accommodated by the

TABLE 16: PROJECTED PERMANENT EMPLOYMENT AT THE PROJECT SITE/a/

<u>Employment Type</u>	<u>Building Space (Gross Sq. Ft.)</u>	<u>Space Per Employee (Sq. Ft.)</u>	<u>Projected Number of Employees</u>
Hills Bros. Coffee Inc. Headquarters Office (existing)	75,000	--	175 /b/
Office	512,000	275 /c/	1,860
Retail	40,000	350 /c/	115
Maintenance and Security	627,000 /d/	12,000 /e/	50
Parking	200,000	5,100 /c/	<u>40</u>
GROSS TOTAL EMPLOYMENT			2,240
LESS EXISTING HILLS EMPLOYMENT ON-SITE/f/			<u>175</u>
NET TOTAL EMPLOYMENT			2,065

/a/ Projections are rounded to the nearest five employees.

/b/ Joe E. Erway, CEDEVCO, meeting, May 15, 1984.

/c/ Downtown EIR Consultant's Report, Environmental Science Associates, Inc., May 1983, p. IV.C.5.

/d/ Does not include building maintenance for the residential component of the project.

/e/ San Francisco Department of City Planning, Format & Guidelines for Preparing an Environmental Impact Report, April 1983.

/f/ Existing on-site employment does not include 155 coffee manufacturing employees currently being consolidated with existing Hills in the City.

SOURCE: Environmental Science Associates, Inc.

project would be primarily in the finance, insurance, and real estate (FIRE) and other office-intensive uses, about 2,440 additional jobs in other sectors of the Bay Area economy would result from the project./1/ The construction-related indirect employment would be generated only during the construction period, and would not be permanent. Thus, the total number of permanent Bay Area jobs that would be supported by growth in downtown employment due to the project would be about 4,505 (2,065 net project jobs plus 2,440 jobs from the multiplier effect)./1/ As the multiplier, by definition, encompasses the entire Bay Area region, the specific number of additional indirect jobs generated directly in San Francisco cannot be estimated.

Cumulative Employment

Employment in the C-3 District has been forecasted for the year 2000 in the Downtown Plan EIR./2/ Although the proposed project is not in the C-3 District, it is located near the C-3 District. The employment forecast incorporates changes in types of businesses locating in the C-3 District, intensity of use of space, and local, national, and international economic trends. A total of 372,000 jobs in the C-3 District is forecast for the year 2000, an increase of 91,200 jobs over the 1984 level. The proposed project would provide approximately 2,120 net new jobs in the year 2000 based on projected (not current) employee densities. Jobs accommodated by the proposed project would be in addition to the 372,000 jobs forecast for the C-3 District in the year 2000 and represent approximately a 0.6% addition to the C-3 employment growth forecast in the Downtown Plan EIR (see also discussion on pp. 111-112, IV.E., Transportation, Circulation and Parking).

HOUSING

Project-Related Housing Demand

To the extent that the project would attract out-of-area employees and contribute to the formation of additional households by existing area residents, it also would contribute to increased local housing demand. It is assumed that the residency and housing location of the existing 175 Hills employees would remain unchanged as their jobs would not be relocated from the site during the three-year construction period.

Not all of the project's net new employees would seek housing in the City. Some of the employees may be already working in San Francisco and could live within or outside of the City, but would not necessarily change their residence location as a result of a new job location. On the assumption that the project's housing demand would be that projected by the January 1982 Office Housing Production Program (OHPP), the project could create a net demand for 455 housing units in San Francisco./3/ (The housing formula contained in the Office Housing Production Program Interim Guidelines is based on 250 gross sq. ft. per office employee, 40% of downtown office workers would live in San Francisco and each household would be occupied by 1.8 workers.) The OHPP formula is the basis for City Planning Commission policy of requiring housing to offset demand created by

office development, which is required for development proposals of 50,000 gross square feet or greater. Another formula recognized by the City, though not adopted policy, calculates that housing demand would be for 220 to 435 dwelling units in the City, based on an estimated 15% to 30% of net new office employees that would desire housing in the City. (101 Montgomery Street Final EIR; EE 80.26, certified May 7, 1981, which assumes that between 15% and 30% of the net new employees would be expected to move to San Francisco and each household would be occupied by 1.4 workers.)

These two formulae provide an estimated range of housing demand which are specific to office workers in the downtown. Whether a similar level of demand would be generated by generally lower cost office space that could locate in the project area is not known. These formulae only include estimates of office workers living in San Francisco; they do not include factors for estimating workers living in other parts of the region (see Residence Patterns and Housing discussion, p. 157).

Housing Policy

Under the January 1982 OHPP Interim Guidelines, the City Planning Commission could require the project sponsor to provide 455 units in San Francisco to meet the estimated housing demand of the project. The current OHPP guidelines allow one-for-one credits for the number of bedrooms, and multiple credits, two- (or more) for-one, for moderate- or low-income units. The 85 residential units provided in the project would contain an average of about 850 sq. ft. of living area; 75% (60-65 units) would be one-bedroom, and 25% (20-25 units) two-bedroom. These units would entitle the project sponsor to 105-110 housing units/credits under the OHPP Interim Guidelines. As provided for in OHPP, the remaining 345-350 housing units/credits could be satisfied by constructing units off-site, financing off-site housing development, or contributing funds to a housing subsidy pool to be administered by a City agency. The 100,000 sq. ft. of housing provided on-site would address the floor area and design for residential development on the Hills block, recommended by the Department of City Planning./4/ (See Architectural Resources, Urban Design and Visual Quality, p. 77.)

The 1982 OHPP guidelines are currently being revised. In the most recent draft (July 19, 1984), the implementing ordinance for the revised guidelines would contain provisions for estimating net housing requirements in both the C-3 and non-C-3 districts, and

would require that 50% of the housing units be affordable to low and moderate-income persons for at least 20 years. The draft ordinance also contains provisions for in-lieu payments (instead of housing construction), and an exemption for existing businesses.

The July 1984 draft ordinance contains a methodology for estimating housing requirements in the C-3 district, but none has been developed for the non-C-3 district; the draft ordinance indicates that requirements for non-C-3 districts would not exceed the C-3 district requirements. On the assumption that the new ordinance would be based on 512,000 gross sq. ft. of office space (which includes office space in the proposed project which would be occupied by existing Hills employees), multiplied by .000386, the housing demand of the project would be the equivalent of about 198 units./5/

The sponsor has not determined if the housing to be provided on the site would be rental or purchase units. Assuming an average dwelling size of 850 sq. ft., units would be rented for an average of \$1,275 per month (1984 dollars), or would be purchased for an average price of \$212,500 (1984 dollars). Section 1341 of the San Francisco Subdivision Code (which applies to condominium projects) requires provision of 10% low- and moderate-income housing in projects of more than 50 dwelling units, if subsidies are available. As of October 1984, no subsidies for low- and moderate-income housing were available; however, the City is in the process of preparing a bond issue to provide subsidies. Future availability of subsidies will be dependent on federal and state government policies, as well as market conditions./6/ The final requirements of low- and moderate-income housing would be made at the time of application for approval of a condominium subdivision.

Housing Affordability

Pursuant to the California Environmental Quality Act (CEQA) Guidelines, Section 15150a, discussion of housing affordability for new office workers is incorporated by reference from the Second Street Square Final EIR, 82.591E, certified January 12, 1984 (pp. 53-55). Briefly, while a survey of occupants of a building comparable to the project would yield some housing affordability data, accurate identification of housing affordability characteristics for persons entering the San Francisco housing market as a result of a new office project is virtually impossible.

Two major steps are required in such analysis. The first step involves identification of the workers who are newly employed in San Francisco as a result of the project. The problems with making such a determination include: a) the identity of persons employed in the newly constructed space cannot be known prior to occupation of the project; b) persons working in newly constructed space would not necessarily be newly employed in San Francisco; c) newly created employment opportunities may be filled by persons already employed in San Francisco; and d) persons newly employed in San Francisco in newly created jobs may not have obtained their jobs as a result of the project.

The second step involves determining the amount of money that the household of the new workers could, or would, pay for housing. Such an analysis would require a survey beyond the usual areas of housing preference, current housing costs and income, to determine personal household information such as family assets, debts, tax position, etc. Since many people may be unwilling to provide such personal information, the responses received would not accurately reflect current housing affordability.

A limited analysis of housing affordability, based on available data indicates that most project employees would not be able to afford ownership housing in San Francisco, although some employees, depending on the number of workers per household, would be able to do so. Most project employees, except the lowest-paid clerical employees desiring to live alone, would be able to afford rental housing in San Francisco.

Residence Patterns and Housing

Employment growth and building development in downtown San Francisco will result in more employees working and living in the City. Over time, more existing residents will take San Francisco jobs and others who take San Francisco jobs will move into the City.

Downtown Plan Forecast of Residence Patterns

Forecasts of residence patterns in the year 2000 were prepared for the Downtown Plan EIR./8/ These forecasts incorporate future housing, labor force, and employment patterns in San Francisco and throughout the region and consider changing demographic, housing market, and transportation factors.

According to the Downtown Plan EIR forecasts, approximately 189,000 C-3 District workers would be living in San Francisco in 2000. This represents an increase of 30,000 residents employed in the C-3 District over the 159,000 estimated for 1984, a 19% increase./9/ The percentage of C-3 District jobs held by San Franciscans would decline from 55.5% in 1984 to 50.2% in 2000.

The residence patterns of future occupants of the proposed project can be estimated using information developed in the Downtown Plan EIR analysis. Due to the lack of other available information and the proximity of the project to the C-3 district, it is assumed that residence pattern data for the C-3 district developed in the Downtown Plan EIR is applicable and appropriate for the Hills Plaza project. The Downtown Plan EIR approach assumes that employment densities for the proposed project and residence patterns for those working in the project would be similar to those in office buildings in the nearby C-3 District and that the building densities and residence patterns would reflect the average conditions for all similar buildings and occupants in the C-3 District in 2000. According to this approach there would be about 1,060 people employed in the project who would live in San Francisco./10,11/

Estimates Based on the List of Office Projects in Downtown San Francisco

An alternative means of evaluating the cumulative effects of projects such as the proposed Hills project is to use the list of all projects that are under construction, approved, or under formal review. (This list is discussed in Appendix C, pp. A-32 to A-33. The list includes projects throughout the greater downtown, which includes the C-3 District as well as adjacent areas.) It is possible to calculate from the list the change in the number of downtown workers living in San Francisco associated with this amount of development. Adding this number to the 1984 base estimate of downtown workers residing in San Francisco produces an estimate of total downtown workers living in the City, once all projects on the list were built and occupied. The results from this approach indicate that about 230,000 workers in the greater downtown area would live in San Francisco at that time./12/

This approach uses methodology developed for the September 1983 Transportation Guidelines list of cumulative office development prepared by the Department of City Planning. Unlike the Downtown Plan EIR forecast approach, this approach incorporates no changes over time in either employment densities or residence patterns. It assumes that current average conditions (reflected in the Transportation Guidelines) would

continue throughout the build-out period for the list. Using the list approach, approximately 910 net new project workers would live in San Francisco (44%); 560 in the east bay (27%); 330 on the peninsula (16%); and, 270 in the north bay (13%).^{13/} The project would account for about 0.4% of all downtown workers living in San Francisco when all projects on the list were built and occupied.

Differences in Cumulative Approaches

There are several important differences between the two approaches to cumulative analysis: the Downtown Plan EIR approach of forecasting space and employment and the approach of using a list of proposed projects. This first approach incorporates forecasts of new development for all land uses (office, retail, hotel, and housing) and accounts for the demolition and conversion of existing space. The second approach accounts for the net addition of office and retail development. Moreover, the Downtown Plan EIR forecast methodology incorporates changes in economic activity and employment that would occur in the use of existing space, while the list includes the changes accommodated by net new construction and some conversions.^{14/} The Downtown Plan EIR forecast also includes employment growth, such as building maintenance and construction employment, that is not directly related to the occupancy of space. The Downtown Plan EIR forecast incorporates changes over time in residence patterns, reflecting changes in the regional distribution of population, housing, and employment. The list approach applies relationships derived from current condition to the future situation, assuming no changes over time. The Downtown Plan EIR approach is currently limited to the C-3 District while the list covers a larger geographic area. In addition, there is no definite timeframe associated with the list, while the Downtown Plan EIR forecast represents a best estimate of the development likely to be built and occupied from 1984 to 2000. It is because of these differences that the cumulative estimates of future residence patterns under each approach are not comparable.

Housing Market Implications for San Francisco

With continued employment growth, there would be more people with preferences for San Francisco housing and with greater financial resources to pay for housing. This additional demand for housing would be added to an otherwise large group of consumers with preferences for City housing. The supply of housing is expected to be expanded in San Francisco. However, the private market is currently unable to directly produce an adequate supply of affordable housing.

There would be greater competition for available housing units with employment growth than without it. As a result of increased competition, housing prices and rents would be expected to increase. Generally, continued employment growth at the levels reflected by the Downtown Plan EIR forecasts and the cumulative list could contribute to a future situation where housing prices and rents are moderately higher, on average, than current levels.

A more competitive City housing market with higher prices and rents would affect the type and quality of housing that could be purchased or rented for various prices and rents, the share of financial resources devoted to housing, and the extent to which housing needs and preferences would be met. Over the long term, it could also affect the mix of types of residents in the City.

The project would be part of the future pattern of downtown office development and its expansion South of Market. However, as the first major project proposed for the Rincon Hill Plan area, the project could have different effects on the San Francisco housing market than would other commercial developments South of Market. The project could indirectly provide a land-use stimulus for residential development in the Rincon Hill Plan area; if the Rincon Hill Plan is adopted, approximately 3,700 to 6,800 new housing units could be accommodated within the Rincon Hill area.

Regional Cumulative Perspective on Residence Patterns and Housing

The residence patterns of San Francisco workers can also be considered from a regional perspective. As discussed in Residence Patterns and Housing, pp. 157-159, the Downtown Plan 1984 estimates and forecasts for the year 2000 indicate that the largest number of C-3 District workers would live in San Francisco (50%), followed by the East Bay (29%), the Peninsula (13%), and the North Bay (8%).^{10/} Due to the lack of other available information, and the project site's proximity to the C-3 District, it is assumed that the regional residence patterns forecast in the Downtown Plan EIR for the C-3 district would be applicable to the project. On the basis of those proportions (and employee densities for the year 2000), an estimated 1060 net new employees would live in San Francisco; 615 in East Bay; 275 on the Peninsula, and 170 in the North Bay.

The residence patterns forecast using the list of downtown projects, which includes the Hills Plaza project, leads to similar conclusions.^{12/} (This forecast was discussed in Residence Patterns and Housing, pp. 157-159.)

In terms of the region's housing market, downtown development and employment growth would not, by themselves, have a major effect on the housing markets in other Bay Area counties or in the region overall./15/ C-3 district workers would represent a relatively large share of all employed San Franciscans and relatively smaller proportions of the labor force in other Bay Area counties. As a part of total regional employment growth to the year 2000, however, increases in San Francisco employment can be viewed as contributing to regional housing demand. A strong regional economy has been and will continue to be a factor supporting a competitive regional housing market with relatively high housing prices and rents.

NOTES - Employment and Housing Factors

/1/ Indirect employment projections are based on the Bay Area Input-Output Model from Cooperative Extension Service, University of California, Berkeley, San Francisco Bay Area Input-Output Model 1967-1974, July 1978. A multiplier of 1.18 was used for FIRE and 1.55 for construction.

/2/ San Francisco Department of City Planning, Downtown Plan EIR, certified October 18, 1984, pp. IV.C.29 to IV.C.61.

/3/ Dean Macris, Planning Director, Department of City Planning, Memorandum, January 1982, Interim Guidelines for the Office Housing Production Program, calculated as follows:

587,000	gross sq. ft. of office space
<u>- 75,000</u>	less gross sq. ft. of office space to be occupied by existing (175) Hills employees
512,000	gross sq. ft. of net office space
<u>512,000</u> 250	x .40% divided by 1.8 = 455 housing units

/4/ Dean Macris, Director of Planning, San Francisco Department of City Planning, letter to Norman E. Dean, Hills Bros. Coffee Inc., November 15, 1983.

/5/ San Francisco City Attorney's Office, July 19, 1984, Draft Amendment to Part II, Chapter II of the San Francisco Municipal Code to Impose Conditions on Approval of Permit Applications Designed to Mitigate Housing Problems Caused by Projects.

/6/ Jim Shea, Housing Finance Officer, San Francisco Mayor's Economic Development Office, telephone conversation, October 5, 1984.

/7/ San Francisco Department of City Planning, Second Street Square Final EIR, 82.591E, certified January 12, 1984, pp. 53-55.

/8/ San Francisco Department of City Planning, Downtown Plan EIR, certified October 18, 1984, Section IV.D and Appendix I, pp. I.8 to I.30.

/9/ San Francisco Department of City Planning, Downtown Plan EIR, certified October 18, 1984, p. IV.D.67.

/10/ For a description of the residence patterns forecast methodology, see the Downtown Plan EIR, Appendix I, pp. I.8-I.30.

/11/ In order to ensure consistency with the cumulative transportation analysis (pp.110-127 of this EIR) and to provide information on region-wide impacts, this section does not use the OHPP and 101 Montgomery formulae for estimating the number of total workers who would live in San Francisco. These formulae only provide estimates of office workers living in San Francisco; they do not include factors for estimating workers living in other parts of the region. These formulae were applied to the project in the project-specific impact section of this report, pp. 154-155.

/12/ For the 1984 estimates of workers in the greater downtown area, the C-3 District estimates of employment and residence patterns prepared for the Downtown Plan EIR were used as a base to which order-of-magnitude estimates for that year for the other downtown areas were added. The September 1983 Transportation Guidelines, prepared by the Department of City Planning, were used to estimate employment and residence patterns for projects on the March 10, 1984 list for the greater downtown area. The workers associated with these new projects were added to the 1984 base year total estimate.

/13/ See Transportation Guidelines, pp. 28 and 30 for maps of the Cumulative Development Study Area and the South of Market/Folsom area.

/14/ As explained in the Downtown Plan EIR, the use of existing space is expected to intensify by the year 2000. For example, office employment growth is forecast to exceed the growth of employment that would be accommodated by the development of new office space. From 1990 to 2000, more intensified use of existing space would be equivalent to about a 40% increase in the net addition of office space forecast for that period. (See p. IV.B.41 in Downtown Plan EIR.)

/15/ San Francisco Department of City Planning, Downtown Plan EIR, certified October 18, 1984, pp. IV.D.81 and IV.D.82; Responses to Comments and additional informational text shown in Comments and Responses, D.39 to D.44, both hereby incorporated by reference and summarized (see p. 160).

I. CUMULATIVE POLICE AND FIRE PROTECTION SERVICES

The proposed project would contribute to the cumulative demand for police and fire protection services. Net public costs of providing services to cumulative development in the South of Market, and in the Rincon Hill area particularly, are difficult to quantify. No studies have been developed for these areas as they have been for the C-3 District.

The Rincon Hill Plan area is generally occupied by low-intensity uses. Depending on the timing of the buildout of Rincon Hill and the buildout of other proposed development South of Market (north of Folsom St.), service thresholds may be met that would require new capital expenditures. The Rincon Hill Plan Draft EIR indicates that existing police protection in the project area would not be adequate to serve the area upon full

build-out. The Police Department would not prepare to increase personnel or equipment until calls start increasing (i.e. after construction and occupancy). If a new patrol unit were required, it would cost \$77,000 per year in 1980 dollars; if a new patrol car would be required, costs would increase by \$5,500 plus \$.23 per mile./1/

The Fire Department indicates that it would be able to provide adequate service to the project area, with the exception of a major disaster, fire or earthquake. Cumulative effects with buildout of the Rincon Hill Plan could increase the demand for fire protection services. If, upon buildout, fire protection services are inadequate, the Fire Department would evaluate what further steps need to be taken to insure fire protection. It is estimated that the costs of a new company in 1980 dollars would be \$90,000 for a new engine and \$750,000 annually for personnel./1/

Additional marginal service costs attributable to individual projects in the Rincon Hill Plan area cannot reliably be quantified. Costs for added police and fire protection would be expected to be covered by annual property, payroll and business tax revenues generated to the General Fund by projects in the Rincon Hill area. The project would generate a net increase of approximately \$1.7 million to the General Fund from these revenue sources. Due to its office component, the project would most likely offset its share of added cumulative service costs, because of its greater contribution of property, payroll and business taxes than would be provided by the residential uses proposed for Rincon Hill.

NOTE - Cumulative Police and Fire Protection Services

/1/ Department of City Planning, June 22, 1984, Rincon Hill Plan Draft EIR (82.39E).

J. GROWTH INDUCEMENT

Total net increase in floor area on-site would be 590,200 sq. ft., including parking. The project would include a net increase of 524,600 gross sq. ft. of office space, and add about 100,000 sq. ft. (85 units) of new housing, and about 40,000 gross sq. ft. of new retail space (see more detailed discussion on p. 20 and Table 2, p. 35). Employment at the site would increase from about 175 employees to about 2,240 (exclusive of the 155 employees that would be relocated to another Hills plant in San Francisco). With the exception of

Hills employees, the tenants of the proposed project are unknown, but could include firms expanding or relocating from other San Francisco locations, tenants relocating from outside San Francisco, and companies new to the Bay Area. The increase in employment at the project site, therefore, would not necessarily represent employment that is new to San Francisco. If the project were fully leased, however, and the availability of project office space did not create permanent vacancies in other San Francisco office buildings, total employment in San Francisco would eventually increase by about 2,065 jobs due to the project. Approximately 2,440 additional permanent jobs would be supported indirectly in San Francisco through the multiplier effect (see Chapter IV., H., Employment and Housing Factors, p. 152-153).

The project, along with the adoption of the proposed Rincon Hill Plan, would further increase the attractiveness of this portion of the South of Market for office and residential development. The project would help establish Rincon Hill as a major new residential area in the City, which would provide between 3,700 and 6,800 new housing units in the City. As the first major development within the Rincon Hill Plan area, the project would stimulate and encourage other development, primarily residential, as called for in the Rincon Hill Plan. The project's introduction of commercial and residential land uses would be expected to contribute to rising land values and rents in the South of Market that have been documented by the Department of City Planning./1/

The project and proposed residential uses in the Rincon Hill Plan area could stimulate development in the Rincon Point - South Beach Redevelopment Area, particularly the retail, office, hotel and open space uses approved in Rincon Point Subarea located north and east of the site (see Figure 14, p. 46).

The project would add 2,065 new on-site workers and 150 new on-site residents on the site, and thus, would introduce new demands for retail goods and services, both on- and off-site. This demand could be met in part by the 40,000 sq. ft. of retail space proposed as part of the project.

NOTE - Growth Inducement

/1/ Dean Macris, Director of Planning, San Francisco Department of City Planning, "Memorandum: South of Market Interim Controls," January 26, 1982.

V. MITIGATION MEASURES WHICH WOULD MINIMIZE THE POTENTIAL IMPACTS OF THE PROJECT

In the course of project planning and design, measures have been identified that would reduce or eliminate potential environmental impacts of the proposed project. Some of these measures have been or would be adopted and implemented by the project sponsor, project architects or contractors and, thus, are proposed as part of the project. Some measures are under consideration and others have been rejected. Implementation of some measures may be the responsibility of public agencies.

Each mitigation measure and its status are discussed below. Where a measure has not been included in the project, the reasons for this are discussed. Measures indicated with an asterisk (*) were adopted as part of the Final Initial Study (see Appendix A, pp. A-25 to A-28).

A. LAND USE AND ZONING

MEASURES INCLUDED IN THE PROPOSED PROJECT

- To provide improved pedestrian circulation and add new open space in the Rincon Hill Plan area, the project would include a publicly accessible mid-block (east-west) plaza. The plaza would direct pedestrian flows to the corner of Steuart and Folsom Sts., providing a pedestrian link from Rincon Hill to The Embarcadero and the waterfront. The mid-block plaza also would conform to the pedestrian pathway proposed for the project block in the Rincon Hill Plan, A Proposal for Citizens Review, June 1984 (hereinafter referred to as Rincon Hill Plan). The mid-block plaza could pose safety problems for pedestrians crossing The Embarcadero, if they chose to "jaywalk" across The Embarcadero directly from the mid-block plaza; see p. 170 for a mitigation measure under consideration to reduce this potential effect.

B. ARCHITECTURAL RESOURCES, URBAN DESIGN AND VISUAL QUALITY

MEASURES INCLUDED IN THE PROPOSED PROJECT

- The project would retain, rehabilitate and adaptively reuse for office space the building at Two Harrison St., a designated City landmark.
- The height and parapet line of the base of the new construction would continue the upper cornice line of the landmark building. Visual relationship and transition between new and older buildings are encouraged in the Urban Design Element of the Comprehensive Plan (Policies for Conservation, Policy 4, p. 35).
- The project would include the following urban design elements which, in addition to being mitigations, would conform to the design objectives for the project block recommended by the Department of City Planning and Rincon Hill Plan.
 - The heights of the residential tower, Spear St. tower element, and Steuart St. penthouse would be varied to provide visual interest and avoid the visual benching created by a number of building rooflines at the same elevation.
 - The residential and office towers would be separated by the six-story base so that the towers do not merge visually when viewed from the street. This manner of building siting would reduce screening of downtown views from the Bay Bridge.
 - The base of the building would be highly detailed to provide visual interest to pedestrians. The facade of the base would be divided into sub-elements, distinguished by variations in detailing, window proportions, and materials.
- The project sponsor would review the project design with the Department of City Planning to assure that the project would not conflict with narrowing of the roadway and widening of sidewalks on Spear St. as proposed in the Rincon Hill Plan.

MEASURE NOT INCLUDED IN THE PROJECT

- The mechanical penthouses of the project could be reduced to 16 ft. in height to comply with the requirements of the existing City Planning Code. This measure is under consideration by the sponsor and is currently being examined by the project architects.

C. HISTORIC AND ARCHAEOLOGICAL RESOURCES

MEASURES INCLUDED IN THE PROPOSED PROJECT

- In June 1984, the sponsor retained a historical archaeologist to perform an archival search and a site inspection to determine the potential for discovery of cultural or historical artifacts on the site. On the basis of the archival search, it was determined that two structures listed on the 1853 U.S. Coast Survey could remain under the site, located approximately within 50 ft. of the Spear St. property line midway between Harrison and Folsom Sts. Prior to the start of construction, the sponsor would meet with the Department of City Planning to determine if subsurface construction activities are proposed within this area, and if so, the sponsor has agreed to hire a qualified professional archaeologist to supervise a test program prior to construction to determine if these structures exist. This test program would include a maximum of four mechanical borings along the Spear St. frontage. Findings of the test would be submitted to the Environmental Review Officer (ERO) in the form of a written report.

If the test borings indicate high probability of discovery of cultural artifacts, the ERO may require that an archaeologist be present during site excavation and record a daily log of observations. The ERO also may require cooperation of the project sponsor in assisting such further investigations on site as would be appropriate prior to, or during project excavation, even if this results in a delay in excavation activities.

Should cultural or historic artifacts be found during project excavation, the archaeologist would assess the significance of the find, and immediately report to the ERO and the Secretary of the Landmarks Preservation Advisory Board.

The ERO would then recommend specific mitigation measures, if necessary, in consultation with the State Office of Historic Preservation. Excavation or construction which might damage the discovered cultural resources would be suspended for a maximum of four weeks to permit inspection, recommendation and retrieval, if appropriate. This maximum of four weeks would include any other time periods for which the ERO has required a delay in excavation activities.

D. TRANSPORTATION, CIRCULATION AND PARKING

MEASURES INCLUDED IN THE PROPOSED PROJECT

- During the construction period, construction truck movements would be permitted only between 8:00 a.m. and 4:00 p.m. to minimize area peak-hour traffic conflicts. The project sponsor and construction contractor would meet with the Traffic Engineering Division of the Bureau of Engineering of the Department of Public Works, the Fire Department, Muni, and the Department of City Planning to determine feasible traffic mitigation measures to reduce traffic congestion during construction of this project and other nearby projects.
- If additional Muni service is extended to the Hills Plaza site, the project, in consultation with Muni, would provide streetscape amenities (e.g. benches, planter boxes or informational displays) for transit stops along the project frontage (see the last measure on p. 170).
- The project would improve the conditions of sidewalks on all sides of the site by replacing or resurfacing the existing walkways and would include a mid-block public pedestrian plaza as part of the east-west pedestrian link between Rincon Hill and The Embarcadero.
- Separate access would be provided from Spear St. to the bicycle storage facilities provided in the parking garage. The sponsor would provide additional bicycle spaces in excess of the 21 required by the City Planning Code. The total number of additional spaces to be provided would be determined by the bicycle-space demand generated by project employees, couriers, and short-term visitors.

V. Mitigation Measures

- Garage occupancy levels would be monitored and a sign would be placed at the Folsom St. entrance indicating when the garage was full to minimize unnecessary travel through the garage and queuing at the entrance.
- The new construction would include a total of four truck loading spaces and two van spaces, the equivalent of five spaces. This would be one more space than would be required by Section 151 of the existing City Planning Code.
- The loading spaces provided in the new construction would meet the access requirements and specifications contained in Resolution No. 9286. To meet the total specification of six loading spaces under Resolution No. 9286, the sponsor proposes to request the necessary permits from the Department of Public Works for expansion of the one space curbside loading zone on Harrison St. to a two-space zone. Redesignation of the curb space on Harrison St. adjacent to the landmark building entrance to provide a two-space loading zone would provide adequate loading space for the landmark building (including demand from the existing 62,400 gross sq. ft. of office space); this would reduce or eliminate the conflicts between pedestrians and delivery operations in the mid-block plaza, providing that deliveries to the landmark building were made from the curb rather than from the loading area in the new building.
- Building directories and signs for the service entrances and elevators would be provided in the landmark building and new construction as specified under Resolution No. 9286.
- Should Ordinance 224-81, which requires the sponsor to contribute funds for maintaining and augmenting transportation service in an amount proportional to the demand created by the project, be declared invalid by the courts (in the event of an appeal of the Superior Court Decision of September 27, 1984), the project sponsor has agreed to participate in any subsequent equivalent mitigation measures adopted in lieu thereof that are equitable and legal, which the City adopts to apply to all developments which are similarly situated.
- A member of the building management staff would be designated as a "transportation broker" to coordinate measures that are part of a transportation management program, such as: encouraging a flexible time system for employee working hours (to

be developed by project tenants in consultation with the Department of City Planning) to reduce peak-period congestion by a planned spreading of employee arrivals and departures; encouraging transit use through the on-site sale of BART, Muni, and other carriers' passes to employees; and encouraging employee carpool and vanpool systems in cooperation with RIDES for Bay Area Commuters by providing a central clearinghouse for carpool and vanpool information.

- Within a year of full occupancy of the project, the sponsor would conduct a survey, in accordance with methodology approved by the Department of City Planning, to assess actual trip generation patterns of project occupants and actual pick-up and drop-off areas for carpools and vanpools. The project sponsor would make this survey available to the Department. This measure would provide needed information to aid in transportation planning within the City.
- The project sponsor would, in consultation with the Muni, install eyebolts or make provisions for direct attachment of eyebolts for Muni trolley wires on the proposed building wherever necessary or agree to waive the right to refuse the attachment of eyebolts to the proposed building if such attachment is done at City expense.

MEASURES NOT INCLUDED IN THE PROJECT

- As specified in the Rincon Hill Plan, the project sponsor could contribute in-lieu fees to cover the provision of nearby off-site parking spaces equal in number to the on-site deficiency of the project. Under the Rincon Hill Plan, the estimated parking deficiency would be 78 spaces (see pp. 127-130 for a discussion of the project's parking requirements). The sponsor is currently discussing the feasibility and implementation of this measure with the Department of City Planning.
- To discourage mid-block pedestrian crossing of the Muni Metro right-of-way along Steuart St., the sponsor would consult with Department of City Planning, Muni and Department of Public Works regarding measures to channel pedestrians to the corner of Folsom and Steuart Sts. for crossing (i.e., street landscaping). This measure is under consideration by the sponsor. Its implementation would depend on the proposed design and location of any proposed Muni Metro portal on Steuart St.

V. Mitigation Measures

- To reduce the potential for conflicts with pedestrians at the garage entrance on Folsom St., the entrance to the garage could be redesigned from the radius curb return shown in Figure 5, p. 24, to a drop curb driveway across the sidewalk (similar to the one shown for the garage exit on Spear St.). This measure is currently under consideration by the project sponsor, pending redesign by the project architects.
- The sponsor could request redesignation of the curb space on Spear St. to a two-space loading zone to serve the landmark building. This measure has not been included in the project because use of curb space on Spear St. would require access via a raised (not at street grade) entrance to the building which may impede loading operations. Under the existing one-way street system, Spear St. is one-way southbound; this would require service vehicles and trucks with side loading to load and unload on the street side, a potentially hazardous operation. Under the Rincon Hill Plan, Spear St. would be two-way. However, the proposed widened sidewalks and the narrowed roadway under the Rincon Hill Plan would preclude curbside loading on Spear St. (trucks would block the travel way) unless cutouts were provided in the sidewalk.
- The sponsor could retain a portion of the existing loading facilities on either Spear St. or Steuart St. to serve the landmark building. This measure has not been included in the project because use of existing facilities would require vehicles to back into loading bays flush with the landmark building, which would block street traffic on either Spear St. or Steuart St. Additionally, the proposed improvements to Spear St. described in the Rincon Hill Plan (widened sidewalks, and a narrowed roadway) would preclude retention of either all or part of the existing back-in loading docks at the landmark building.
- The sponsor could provide an enclosed off-street loading space in the landmark building to meet the full intent of Resolution No. 9286. The measure has not been included in the project because provision of the enclosed space in the landmark building would require exterior alteration to an existing dock-high (approximately 3.5 ft. above street level) loading door and new access ramps.

MEASURES THAT COULD BE IMPLEMENTED BY PUBLIC AGENCIES

- The City could adopt and implement the transportation improvements described in the Downtown Plan. Of particular importance to the Hills Plaza project would be the proposed Muni Metro extension to Fourth and Townsend St., which would provide a direct transit link between Hills Plaza, the southwest portion of the City, and other transit services along Market St. Additionally, the City could improve transit service to the site by the provision of the Muni E-Line streetcar service along Steuart St. and The Embarcadero.
- Pedestrian conditions could be improved by implementing the street-narrowing and sidewalk-widening provisions of the Rincon Hill Plan for north-south streets in the Rincon Hill Plan area. Implementation of this measure would be under the jurisdiction of the Department of Public Works.
- Muni could extend several bus lines (such as the 5-Fulton or 38-Geary lines) which currently terminate at the Transbay Transit Terminal to serve Hills Plaza and other development in the Rincon Hill and South Beach areas.
- Intercept parking lots could be constructed south of Harrison St. between Main St. and Fremont St. These lots would be within walking distance of Hills Plaza and could accommodate unmet parking demand at the project site.
- Pacific Gas and Electric Company could coordinate work schedules with other utilities requiring trenching during construction, so that street disruption would take place during weekends and off-peak hours. This should be done through the San Francisco Committee for Utility Liaison on Construction and Other Projects (CULCOP). In-street utilities should be installed at the same time as the street is opened for construction of the project to minimize street disruption.
- The Police Department and Department of Public Works could remove existing curb parking on Harrison St. adjacent to the landmark building and extend the existing curbside loading zone to create a 70-ft.-long curbside loading area for the landmark building. This would provide direct access to the elevators serving the landmark building without requiring the demolition that would be needed to provide enclosed, on-site loading space for this structure.

E. AIR QUALITY

MEASURES INCLUDED IN THE PROPOSED PROJECT

Construction

- * During excavation, unpaved demolition and construction areas would be wetted down with water to reduce dust emissions; two wettings per day with complete coverage would reduce particulate emissions (dust) by about 50%.
- * The sponsor would require the general contractor to maintain and operate construction equipment in such a way as to minimize exhaust emissions. During construction, trucks in loading and unloading queues would turn off their engines to reduce vehicular emissions.

Operation

- Mitigation measures identified for traffic impacts (see pp. 168-172) would also mitigate air quality impacts. Increasing roadway capacity (where feasible and cost effective), reducing vehicular traffic through increased ridesharing (carpool, vanpool, and transit), and implementing flexible and/or staggered work hours would reduce local and regional emissions of all pollutants.
- Mitigation measures identified for energy impacts (see pp. 175-177) could be implemented to mitigate air quality impacts. Reducing natural gas combustion and electricity generation would reduce local and regional emissions of all pollutants.
- Providing 85 housing units on-site would improve the balance of jobs and housing in San Francisco by reducing long-distance home-to-work travel, and local and regional emissions of all pollutants.

* Included in the Final Initial Study; see p. A-26.

F. NOISE

MEASURES INCLUDED IN THE PROPOSED PROJECT

Operation

- * As recommended by the Environmental Protection Element of the San Francisco Comprehensive Plan, an analysis of noise reduction measurements would be prepared by the project sponsor and presented to the Departments of Public Works and City Planning before issuance of permits for new building construction by the Central Permit Bureau. Recommended noise insulation features, including fixed windows and climate control for office space and noise attenuation features for residential open space would be part of the proposed project as necessary to reduce noise levels to those required by State law or recommended in the Comprehensive Plan.

Construction

- * The project sponsor would require the contractor to muffle and shield intakes and exhaust of construction equipment, shroud or shield impact tools, and use electric-powered rather than diesel-powered construction equipment, as feasible.
- * The project sponsor would require the general contractor to construct barriers around the site and around stationary equipment such as compressors; these barriers could reduce construction noise by as much as five dBA. The sponsor would require the general contractor to locate stationary equipment in pit areas or excavated areas, as these areas would serve as noise barriers.
- * The project sponsor would predrill holes for piles in order to minimize noise and vibration from piledriving where feasible. The actual pounding from piledriving would occur during a 5 to 15 minute span per pile. The sponsor has agreed to restrict piledriving to hours required by the Department of Public Works.

* Included in the Final Initial Study; see pp. A-25 to A-26.

- * The level of vibration in the landmark building would be mechanically monitored during piledriving for the new construction. Should unacceptable levels of vibration occur, mitigation measures would be taken, after conferring with the Department of Public Works - Bureau of Engineering, to protect the structure and minimize effects on office workers in the landmark building.
- * To reduce construction noise effects in offices at the landmark building, office functions and personnel fronting the construction site would be relocated to less exposed areas of the building. Alternatively, the project sponsor would cover windows fronting the construction site with plywood, plastic, or gypsum board, and provide gaskets for entry doors during project construction. The measure selected would depend on the feasibility of relocation of office functions and personnel within the building, and the potential need to maintain openable windows during phases of construction.

G. ENERGY

MEASURES INCLUDED IN THE PROPOSED PROJECT

- Variable-air-volume heating, ventilating, and air conditioning (HVAC) systems in the office spaces would vary the quantity of air to match the required load. This would save fan motor energy and air cooling and heating energy.
- The HVAC systems would be designed for partial-load operation of the buildings after hours and on weekends; the HVAC systems would consist of multiple units to permit on-line equipment capacity to closely follow demand, resulting in more efficient operation.
- An economizer cycle would use outside air for office ventilation whenever outside temperatures were low enough to assist in cooling interior spaces. This measure would save energy otherwise used to cool inside air.

* Included in the Final Initial Study; see p. A-26.

V. Mitigation Measures

- Heat absorptive glass would be used for all windows, except those at the ground level.
- Return-air ducts in light fixtures would reduce air conditioning loads by removing part of the heat generated by light fixtures.
- Time-schedule operation of major equipment would be used to reduce energy use by preventing operation of this equipment when the building was unoccupied.
- Time-clock and CO-monitor operation of garage ventilation systems would reduce energy consumption by operating the ventilation fans only when required.
- The project would be designed for individual metering of residential units to promote accountability of project tenants for their energy use.
- The project building management would employ a transportation broker to distribute mass transit, carpooling, and vanpooling information to employees and project tenants. This would reduce energy consumed in transporting project employees and residents to and from the site.

MEASURES NOT INCLUDED IN THE PROJECT

- Prior to issuance of the building permit, or structural addendum (as directed by the Department of City Planning), the sponsor could be required to submit to the Department a report containing its assessment of the cost effectiveness of using measures outlined in the following checklist, including reasons for rejecting any of the measures. Measures to be considered in this report could include:
 - Passive solar energy design measures;
 - Maximum use of natural illumination (daylighting) through window design, light shelves, skylights, etc.;
 - Other lighting reduction strategies, including high efficiency outdoor lights, low energy ballasts, task lighting, time switches on storerooms, occupancy sensors, etc.;
 - Alternates to air conditioning, including natural ventilation;
 - Computer monitoring systems for HVAC, lighting, etc.;

- Load shedding capacity;
- Heat recovery systems;
- Multiple metering (e.g. metering every floor); and,
- Operable and/or fixed shading on all south and west facing glazing.

The feasibility of these measures will be considered as the project design is further developed.

- The sponsor could agree to an energy audit of the project within one year of full occupancy, as determined by the Department of City Planning. The actual energy consumption of the structures, taken from Pacific Gas and Electric Company's (PG&E's) monthly billings, could be reported to the Department of City Planning. If consumption exceeded applicable state standards for energy conservation in effect when the Building Permit was issued, the sponsor would request an audit by PG&E or another certified energy professional, and implement energy conservation measures recommended in the audit that have a payback period less than three years. Results of the audit could be made available to the Department of City Planning. This measure is under consideration.
- The project owner could ensure that janitorial services in office areas were performed as often as possible during normal business hours to avoid energy consumption by lighting and other building energy systems when the office space was unoccupied. Implementation of this measure is under consideration by the sponsor and would depend on the convenience to tenants' operations and whether janitorial services were provided under a single "master" contract.
- Project engineers could meet with PGandE load management specialists to determine the extent to which peak demand control measures could reduce the project's peak electrical demand. This measure will be considered by the sponsor when building design is developed further.
- The project could include a recycling center and the project sponsor could contract for recycling services. This would conserve most of the energy required to manufacture the otherwise recycled materials, such as glass, aluminum and paper. The feasibility of this measure is under consideration by the sponsor.

H. GEOLOGY/TOPOGRAPHY/WATER

MEASURES INCLUDED IN THE PROPOSED PROJECT

- * During excavation, the contractor would shore up or otherwise protect the sides of the excavation against lateral movement of soils. If required, the landmark building would be underpinned to prevent structural damage.
- * The landmark building would be closely monitored to minimize potential adverse effects such as cracking or tilting during construction.
- * The project sponsor has had a geotechnical report prepared for the project by a California-licensed engineer, and would comply with the recommendations of that report for foundation design and site preparation. This measure would reduce the potential for building damage or failure due to geological, soils, or seismic conditions at the site.
- * During construction, the contractor would sweep streets adjacent to the construction site mechanically or by hand to prevent siltation of storm drains and generation of dust. The contractor would also confine construction equipment, maintenance, and refueling activities to locations where potential petroleum spillage could be contained.
- * Where necessary, the project sponsor would maintain a berm in the excavation between the new construction and the foundations of the existing landmark building.
- On the basis of the final soils report, a program to monitor potential settlement and subsidence impacts would be implemented during the shoring and dewatering activities of construction. The program would monitor any movement or settlement of surrounding buildings and adjacent streets. During the monitoring survey, the Department of Public Works could require that a Special Inspector (as defined in Article 3 of the Building Code) be retained by the project sponsor to perform this monitoring. If, in the judgment of the Special Inspector, unacceptable subsidence were to occur during construction, groundwater recharge would be used to halt this

* Included in the Final Initial Study; see p. A-27.

settlement. Costs for the survey and any necessary repairs to service under the streets would be borne by the contractor.

MEASURES NOT INCLUDED IN THE PROPOSED PROJECT

- * The final soils report to be prepared by the California-licensed engineer for this project would address the potential settlement and subsidence impacts of dewatering of the site. This measure, originally included in the project as part of the Final Initial Study, is no longer proposed because a subsequent, more-detailed, soils report is now available (see preceding measure) which recommends a monitoring program for dewatering.

I. HAZARDS

MEASURES INCLUDED IN THE PROPOSED PROJECT

- * An evacuation and emergency response plan would be developed by the project sponsor or building management staff, in consultation with the Mayor's Office of Emergency Services, to insure coordination between the City's emergency planning activities and the plan developed for the proposed building. The emergency plan of the proposed building would be reviewed by the Office of Emergency Services and implemented by building management insofar as possible before issuance by the Department of Public Works of final building occupancy permits.

J. EMPLOYMENT AND HOUSING FACTORS

MEASURE INCLUDED IN THE PROPOSED PROJECT

- The project would include 85 housing units, which would partially meet the project's total net housing demand of 455 units as estimated by the January 1982 Office Housing Production Program (OHPP) Guidelines.

* Included in the Final Initial Study; see p. A-27.

MEASURES NOT INCLUDED IN PROJECT

- Under the January OHPP guidelines, the project's 85 housing units would be the equivalent of 105 to 110 housing credits. To address the City's OHPP policy, the sponsor could provide an additional 345 to 350 housing credits on-site. OHPP guidelines provide one-for-one credits for the number of bedrooms, and multiple credits, two- (or more) for-one, for moderate- or low-income units.

This measure has been rejected by the sponsor for the following reasons/1/:

Development of additional housing, depending on the number of bedroom credits, would require a minimum of four basement levels of parking under the new construction, two more than are currently proposed. According to the geotechnical and structural engineers for the Hills Plaza project, this additional parking would require dewatering and foundation work that could create risk of subsidence and damage to the landmark building./2/

The sponsor also believes that the additional housing could only be provided on site by decreasing the size of the mid-block plaza, demolishing the landmark building, or increasing the scale of the new construction. The addition of housing to the site would result in new construction of a larger scale than the project, which would not be responsive to policies of the Urban Design Element or Rincon Hill Plan that aim to protect views of the Bay.

- Alternatively, the sponsor could meet requirements of the existing OHPP guidelines by financing off-site housing development or contributing funds to a housing subsidy pool to be administered by a City Agency. This measure is under consideration.

NOTES - Employment and Housing Factors

/1/ Joe E. Erway, CEDEVCO, letter, August 16, 1984.

/2/ Walter D. Buehler, President, Buehler & Buehler Associates, Structural Engineers, Inc., letter communication, August 6, 1984.

VI. SIGNIFICANT ENVIRONMENTAL EFFECTS THAT CANNOT BE AVOIDED IF THE
PROPOSED PROJECT IS IMPLEMENTED

No project-specific significant impacts have been identified. Mitigation measures included as part of the project are described above in Chapter V., Mitigation Measures, p. 165.

Cumulative development in Downtown San Francisco would have a significant effect on the environment in that it would generate cumulative traffic increases as well as cumulative passenger loadings on Muni, BART and other regional transit carriers. These cumulative transportation impacts could cause violations to total suspended particulate (TSP) and localized carbon monoxide (CO) standards in San Francisco with concomitant health effects and reduced visibility. The proposed project would contribute to these cumulative effects.

VII. THE RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF MAN'S ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

The project would contribute to cumulative transportation and air quality impacts, as described in Chapter VI, pp. 110-127 and pp. 138-142, respectively.

For the life of the project, other options for use of the site would be eliminated. Specifically, the project would preclude industrial use of the site. Similarly, the project would prevent alternate mixed-use developments from being constructed on the site.

The sponsor believes that the project is justified now, rather than reserving an option for future alternatives to be developed at the site, for the following reasons: a) the site would be underused, as relocation of industrial uses at the site to another location in San Francisco is currently underway and is expected to be completed by the end of 1985; b) the existing buildings at the site are designed for coffee-processing uses and are not readily adaptable to other industrial uses; c) the project responds to the development guidelines for the Hills Plaza site recommended to the sponsor by Department of City Planning staff; d) the project would create public open space where none now exists; and e) the project could provide a long-term base to induce additional residential and commercial development in the project area, thereby furthering the objectives of the Rincon Hill to create a new residential neighborhood near downtown.

VIII. Significant Irreversible Changes

VIII. ANY SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES WHICH WOULD BE INVOLVED IN THE PROPOSED ACTION SHOULD IT BE IMPLEMENTED

Certain amounts of energy and materials used in the construction of the project would be irretrievable. Some energy sources would be renewable (hydroelectric power) and some amount of the materials used could be recycled at the end of the project's life, depending upon the state of recycling technology and the market for recycled materials at that time. The northern portion of the site (north of the landmark building) would be excavated to a depth of about 14 ft., altering the existing topography of the site. The project would not require development or extension of urban systems to the project site or area. The project could encourage additional development in the Rincon Hill Plan area.

IX. ALTERNATIVES TO THE PROPOSED PROJECT

This chapter identifies alternatives to the proposed project, discusses environmental impacts associated with these alternatives, and gives the reasons the alternatives are under consideration or were rejected by the sponsor in favor of the project. The City Planning Commission may approve an alternative instead of the proposed project if the Commission believes the alternative is feasible and more appropriate for the site.

The following five alternatives are considered: A. Rincon Hill Plan Alternative; B. Residential Alternative; B.1 Residential/Retail Alternative Variant; C. All Office Alternative; and D. No-Project Alternative. See Table 17, p. 185 for a summary of the uses and floor areas analyzed in each of these alternatives.

A. RINCON HILL PLAN ALTERNATIVE

INTRODUCTION

This alternative would comply with the objectives and design controls contained in the Rincon Hill Plan, A Proposal for Citizen Review, June 1984, prepared by the Department of City Planning (hereinafter referred to as Rincon Hill Plan). The Rincon Hill Plan proposes an ordinance that would be incorporated into the City Planning Code to implement a "Special Use District" for the Rincon Hill Plan area. The purpose of this Special Use District would be to "create a unique residential neighborhood close to downtown which will contribute significantly to the City's housing supply, to provide space for additional uses which will provide needed services for the residential population, and to allow existing industrial, service and office uses to remain and create new such uses in designated locations" (see p. 38 of the Rincon Hill Plan). The Rincon Hill Plan proposes that the Rincon Hill area be zoned for "mixed development -- offices, recreation, service retail, and housing." Some new office construction would be permitted

TABLE 17: SUMMARY OF ALTERNATIVES DESCRIPTION

<u>Use</u>	<u>Proposed Project</u>	<u>Alternative A/a/ (Rincon Hill Plan)</u>	<u>Alternative B/a/ (Residential)</u>	<u>Alternative B.1/a/ (Residential/Retail Variant)</u>	<u>Alternative C/a/ (All Office)</u>	<u>Alternative D/b/ (No Project)</u>
Office (sq. ft.)	587,000	587,000	217,000	217,000	710,000	62,400
Retail (sq. ft.)	40,000	40,000	40,000	80,000	40,000	0
Residential (sq. ft.) (No. of units)	100,000 (85 units)	87,400 (74 units)	530,000 (500 units)	490,000 (460 units)	0 --	0 --
TOTAL PROPOSED GROSS FLOOR AREA	727,000	714,400	787,000	820,000	750,000	62,400
Parking (No. of spaces)	410	485 /c/	220 /c/	250 /c/	1,100	55
Height Reclassification						
Residential Tower	Yes	No	Yes	Yes	N/A	N/A
Mechanical Penthouses	Yes	Maybe /d/	No	No	No	N/A
Exception to Bulk Requirements (above 80 ft.)	Yes	No	Yes	Yes	Yes	N/A

/a/ Includes rehabilitation of landmark building and its conversion into all-office uses.

/b/ Assumes that the remaining coffee manufacturing space in the landmark building (187,600 sq. ft.) and other buildings on-site (86,800 sq. ft.) would remain vacant or be used for storage.

/c/ Parking space would meet the requirements of the proposed Rincon Hill Plan.

/d/ Revisions to the mechanical penthouse height requirements of the Rincon Hill Plan are currently under consideration by the Department of City Planning.

SOURCE: Environmental Science Associates, Inc.

in the district "first, to provide daytime support for the service and stores which new housing will require; and second, to provide a buffer between the bridge and the freeways, and the new housing sites" (see p. 3 of the Rincon Hill Plan).

The project site would be located in the proposed Commercial/Industrial district of the Rincon Hill Plan area. This designation would apply to properties which roughly encircle (and are on the periphery of) areas designated for Midrise and Highrise Residential districts. Controls in the proposed Commercial/Industrial district are "essentially those of the existing light-industrial (M-1) use district with some lowering of density allowances and parking requirements [as compared to the Midrise and Highrise districts] and imposition of open space requirements" (see p. 14 of the Rincon Hill Plan). Housing would be an allowable use in the Commercial/Industrial district (see p. 43 of the Rincon Hill Plan).

In addition to the general development controls in the proposed Commercial/Industrial district, the Rincon Hill Plan contains several specific design controls for the project block pertaining to preservation of the landmark building, the development of retail uses, and the provision of a mid-block plaza and pedestrian streets. The Department of City Planning also has developed general land-use and design recommendations for development of the project block./1/

Table 18, pp. 187-188 compares existing zoning controls, the project, the requirements of Rincon Hill Plan, and Alternative A.

DESCRIPTION OF ALTERNATIVE

The design and uses in Alternative A would be substantially the same as those proposed for the project. The alternative would differ from the project to comply with the proposed bulk (above 80 ft.), mechanical space, retail space and parking requirements for the Commercial/Industrial district of the Rincon Hill Plan. The bulk and mechanical space requirements for the Rincon Hill Plan would be the same as those under the M-1 District in existing City Planning Code. Compliance with these requirements would result in fewer residential units, less publicly accessible open space and additional basement parking excavation, when compared to the project. (See discussion below under Environmental Impacts.)

TABLE 18: COMPARISON OF PROPOSED PROJECT AND ALTERNATIVE A WITH THE RINCON HILL PLAN (June 1984)
COMMERCIAL/INDUSTRIAL DISTRICT

Major Development Controls Pertaining To Project Site	Current Zoning Controls	Proposed Project	Proposed Requirements in the Rincon Hill Plan (RHP)	Alternative A
Base FAR with Premiums	5:l	4.3:l	5:l (No Premiums Permitted)	4.2:l
Base FAR without Premiums	5:l	4.8:l	5:l (No Premiums Permitted)	4.7:l
<u>Height Limit</u>				
1) Landmark Building/Tower/a/	84/162	84/162	84/162	84/162
2) Office/Retail Base	105	84	84	80
3) Mid-Block Spear St. Tower Element	105	105	105	105
4) Residential Tower	105	200	200	200
<u>Maximum Length (above 80 ft.)/b/</u>				
1) Landmark Building Tower/a/	248	248	248	248
2) Office/Retail Base	110	320 /c/	110	- /d/
3) Mid-Block Spear St. Tower Element	110	110 /e/	110	110
4) Residential Tower	110	155 /f/	110	93
<u>Maximum Diagonal (above 80 ft.)/b/</u>				
1) Landmark Building Tower/a/	284	284	284	284
2) Office/Retail/Base	140	400 /c/	140	- /d/
3) Mid-Block Spear St. Tower	140	135 /e/	140	135
4) Residential Tower	140	170 /f/	140	132
Open Space				
Residential	36 sq. ft. for each unit or 1.33 sq. ft. common substituted for private. Project total of 3,060 sq. ft. private or 4,070 sq. ft. of common (sub- stituted for private)	one sq. ft. per five sq. ft. of dwelling unit. 21,000 sq. ft. total; 4,000 sq. ft. private (20% of total) and 17,000 sq. ft. common (80% of total) open space. Would comply with RHP	one sq. ft. per 13 sq. ft. of dwelling unit. Up to 40% private, no less than 60% common. Project requirement of 5,560 using 850 sq. ft. average dwelling unit size.	Same as proposed project.

- /a/ Existing building.
/b/ For the Commercial/Industrial District, the maximum length and diagonal dimensions are the same as those in the existing M-1 district. See p. 43 of the Rincon Hill Plan.
/c/ The 84-ft. base of the project would be four feet taller than the 80 ft. height limit above which maximum length and diagonal dimensions apply.
/d/ The office/retail base in Alternative A would be 80 ft. in height; therefore, the maximum length and bulk dimensions would not apply.
/e/ Maximum length and diagonal dimensions refer only to the seventh floor of the Spear St. tower element. These dimensions for floors one through six are included in the office/retail base.
/f/ The residential tower would exceed the maximum length and diagonal dimensions at the seventh through tenth floor levels only.

TABLE 18: COMPARISON OF PROPOSED PROJECT AND ALTERNATIVE A WITH THE RINCON HILL PLAN (June 1984)
COMMERCIAL/INDUSTRIAL DISTRICT

Major Development Controls Pertaining To Project Site	Current Zoning Controls	Proposed Project	Proposed Requirements in the Rincon Hill Plan (RHP)	Alternative A
Open Space Publicly Accessible	No Requirements	25% of site; 38,000 sq. ft. total provided in mid-block plaza (31,000 sq. ft.) and sidewalk arcade (7,000 sq. ft.). Would comply with RHP.	Minimum of 20% of site; project minimum requirement of 30,250 sq. ft.	21% of the site. 32,000 sq. ft., total provided in mid-block (26,400 sq. ft.) and sidewalk arcade (5,600 sq. ft.).
Landmark Preservation	Specified in Article 10 of 1979 Planning Code.	Would preserve Two Harrison Landmark Building.	Encourages Preservation of the Landmark Building.	Same as proposed project; landmark building would be preserved.
Housing	Maximum density of one unit per 600 sq. ft. of lot area or 252 maximum units on site.	85 units; would comply with RHP.	Maximum density of one unit per 200 sq. ft. of lot area or 756 units maximum.	74 units
Parking	1 space/500 occupied sq. ft. (osf) of office; 1 space/500 osf, up to 20,000 osf, plus 1 space/250 osf over 20,000 of retail; 1 space/dwelling unit; lawful deficiency = 204 spaces./h/ (Project total of 975 spaces.)	410; would not comply with RHP.	1 space/1,000 gsf of commercial = 587 spaces/g/; 1 space/4 dwelling units = 21 spaces; lawful deficiency for existing = 160/h/ spaces. Alternative A total of 486 spaces.	486 spaces provided. 76 additional spaces needed over project's provision of 410 spaces. Would require excavation of third parking level.
Pedestrian Streets	No Requirements	Would incorporate a mid-block plaza ranging in width from about 100 to 160 ft. parallel to Folsom St. Would comply with RHP.	36-ft.- wide pedestrian street running parallel to Folsom St. through the project block.	Mid-block plaza very similar to project, although plaza would be slightly narrower due to loss of plaza area for mechanical equipment.
Retail Uses	Permitted in M-1 use district.	40,000 sq. ft. located on the ground floor of the new construction facing only the north side of the mid-block plaza. Retail uses would link to the existing landmark courtyard. Would not fully comply to RHP because retail space would not occupy the south side of the plaza.	Requires that retail uses occupy the full length of both street faces at the mid-block plaza, making use of existing landmark courtyard.	Retail space provided full length of both sides of mid-block plaza by providing retail space in the ground-floor of the landmark building.

/g/ Under the Rincon Hill Plan, commercial is a designation for office and retail uses.
/h/ See pp. 127-129 for a discussion of lawful deficiency of existing parking spaces.

SOURCE: Environmental Science Associates, Inc. and Whisler-Patri Architects

As with the project, Alternative A would provide 587,000 gross sq. ft. of offices, and 40,000 gross sq. ft. of support retail. Alternative A would provide 87,400 gross sq. ft. of residential space (74 units), 11 units fewer than the project. Approximately 32,000 sq. ft. of publicly accessible open space would be provided, 6,000 sq. ft. less than proposed for the project.

As with the project, Alternative A would rehabilitate and convert the existing landmark building, and construct new uses on the northern portion of the site; in this alternative approximately 1,200 gross sq. ft. of retail space would be provided in the ground-floor of the landmark building facing the mid-block plaza.

In Alternative A, the base of the new construction would be 80 ft. instead of 84-ft. as proposed in the project. Alternative A would have a 200 ft. residential tower at the corner of Folsom and Spear Sts. (see Figure 24, p. 190). There would also be a mid-block two-story mechanical penthouse on Spear St. rising above the base. Instead of the pitched-roof mechanical penthouse set back from Steuart St. in the project, this alternative would have a smaller, rectangular penthouse. No height reclassifications would be required for Alternative A, as all mechanical penthouses would be 16 ft. or lower in height.

Under the the Rincon Hill Plan, Alternative A would need to provide about 485 parking spaces, 80 more spaces than the 410 that would be provided in the project. In addition to the existing basement of the landmark building, three levels (one more than the project) of basement excavation underneath the new construction would be required for parking. Loading would be the same as the proposed project -- the equivalent of five off-street loading spaces provided in the new construction with access from Spear St., and two on-street loading spaces provided for the landmark building.

ENVIRONMENTAL IMPACTS

To meet the bulk requirements of the M-1 district, the base of the new construction in Alternative A would be 80 ft. tall, resulting in a lower floor-to-floor height than in the 84-ft.-tall base of the project. The stepped portion (floors eight through eleven of the residential tower) would be eliminated to comply with bulk requirements; removal of the steps would result in 11 fewer units than would be provided in the project and would not

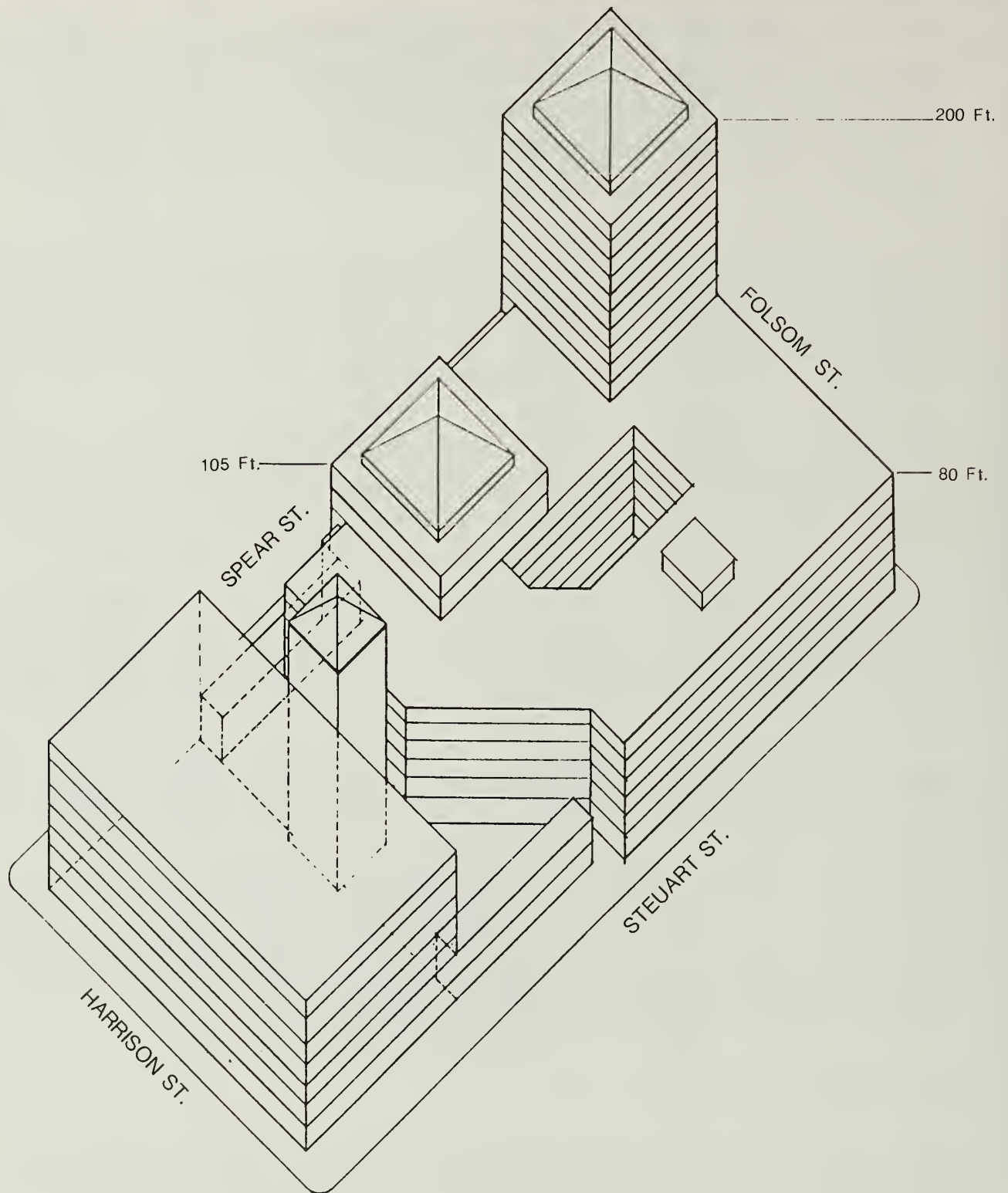


FIGURE 24
A. RINCON HILL PLAN ALTERNATIVE

SOURCE: Whisler Patri Architects

address design guidelines of the Department of City Planning staff./1/ In Alternative A, the height and coverage of mechanical penthouses would be governed by Section 260.3 of the existing City Planning Code (as would the project); this section of the Code would require that the mechanical penthouses on Steuart St., on Spear St., and atop residential tower all be lowered to 16 ft., and that their coverage be no more than 20% of the roof area of the base. Lowering the heights of the mechanical penthouses as provided in the project would require that some mechanical space be placed within the base building, and that the footprint of the base be enlarged to accommodate the mechanical space. This would result in about 6,000 sq. ft. less ground-level open space than would be provided in the project.

The Rincon Hill Plan proposes an amendment to Section 245.2 of the Planning Code requiring Conditional Use authorization (Section 303 of the existing Code) for new development which would increase the floor area of existing structures by more than 20% (see p. 38 of the Rincon Hill Plan). The new construction of the project would increase existing floor area on the site by about 490% (not including the landmark structure which would be retained).

The Rincon Hill Plan would require that 20% of the site should be developed as publicly accessible open space; Alternative A would meet this requirement with the provision of the mid-block plaza and pedestrian arcades, which would provide a total of 32,000 sq. ft. or 21% of the total site area. In addition, residential open space of one sq. ft. per 13 sq. ft. of residential use would be required. This requirement would be met under this alternative with the provision of residential open space located on the roof of the base, the equivalent of roughly one sq. ft. of open space per five sq. ft. of residential use (see Table 18, p. 187).

The Rincon Hill Plan specifies that a mid-block plaza be provided on the project block. This mid-block plaza would create on-site open space, and would link the Rincon Hill area to The Embarcadero and waterfront, both of which are stated objectives of the Rincon Hill Plan. The Rincon Hill Plan calls for ground-floor retail uses facing both sides of the mid-block plaza, which would require creation of retail space on the ground floor of the landmark building, in addition to retail space provided on the ground-floor of the base facing the mid-block plaza.

Alternative A would be consistent with the preservation objective in the Rincon Hill Plan which states that the Hills landmark building "should remain essentially intact."

The landmark building would be rehabilitated with exterior alterations as described for the project (see Project Description, pp. 17-38). A Certificate of Appropriateness would be required for exterior alterations in this alternative, as would be needed with the project.

The heights of buildings in Alternative A would conform to the 84, 105, and 200 ft. height limits stated in the Rincon Hill Plan for the project block; no height reclassification of the 200-ft.-tall residential tower would be required, as would be required for the project, under existing controls.

Land use impacts of Alternative A would be the same as those of the project. Urban design aspects would differ from the project because of the 80-ft.-tall base and elimination of the steps on the residential tower. As a result of these elements, the base in Alternative A would not reflect the height of the landmark building and the massing of the residential tower would not be reduced by the transition in height provided by the steps. Shadow effects of Alternative A essentially would be the same as the project, with an imperceptible decrease in shadows due to the decreased heights of the mechanical penthouses. Alternative A would create shadows on the shoreline promenade similar to the project (see Figures 20A-20D, pp. 87-90).

Because cultural resources would most likely be found in the first 12 ft. of grading^{2/}, the likelihood of encountering cultural findings with this alternative would be the same as the project, even though Alternative A would require excavation of three levels for the parking garage (as compared to two levels for the project).

Transportation, circulation, air quality and energy impacts associated with this alternative would be slightly less than those of the proposed project due to the 11 fewer residential units provided in this alternative. The alternative would require one more level of basement parking than would be required for the project. The increase in open-cut excavation, dewatering, and foundation work needed to construct the additional parking level would require underpinning of the landmark building and would increase the risk of subsidence and damage to this structure.^{3,4/}

The parking requirements of uses at the site would be satisfied entirely on-site in contrast to the proposed project which would have a net on-site deficiency of about 80 spaces (see

parking discussion on pp. 127-130. Parking demand for Alternative A would be for 610 spaces, ten spaces fewer than demanded by the project.

The net direct employment for this alternative would be about 2,075 jobs, 10 more jobs than the proposed project. On the basis of the January 1982 Office Housing Production Program guidelines (OHPP), housing requirement for the Rincon Hill Plan Alternative also would be the same as for the proposed project, 455 units. However, this alternative would provide 74 units, 11 fewer housing units than the proposed project.

STATUS OF ALTERNATIVE/5/

Alternative A would strictly comply with the requirements of the Rincon Hill Plan and its proposed implementing ordinance. The proposed project substantially would be the same as Alternative A, except that it would not meet the bulk, mechanical space, retail space location and parking requirements of the Rincon Hill Plan. The sponsor believes that it would not be possible to construct a project on the Hills site that would meet these requirements and still maintain the architectural integrity and structural soundness of the landmark building. Therefore, the sponsor has rejected Alternative A, in favor of the project, for the reasons described below.

The project sponsor has worked closely with the Department of City Planning staff concerning development of the Hills site and, as a result, was provided with design guidelines by the Planning staff which emphasize design compatibility of the scale and massing of the new construction with the landmark building./1/ The sponsor believes that lowering the six-story office base to 80 ft. and lowering the heights of the rooftop mechanical penthouses would not be architecturally compatible with the landmark building in three respects: 1) The parapet of the six-story base would not align with and visually extend the cornice line of the 84-ft. landmark building; 2) the pitched roof of the 105 ft. tower element would be lowered, resulting in a bulkier appearance as there would be less vertical separation above the roof of the base; and, 3) the pitched mechanical penthouse of the 200 ft. tower would be lowered, appearing bulkier and less reflective of the tower portion of the landmark building.

The reduction in floor-to-floor height in the 80 ft. base would reduce the building's energy efficiency and marketability by eliminating the inter-floor spaces required for ducting and utility conduits necessary for state-of-the-art office communications and electronics networks.

Decreasing the rooftop height of the mechanical penthouses would require that a substantial portion of the mechanical equipment be located on occupied floors, resulting in inefficient floor plans and leaseable areas. If the alternative were to retain the same square footage as the proposed project, the decrease in heights of the mechanical penthouses also would result in the loss of about 6,000 sq. ft. of open space, the building footprint of the base would need to be enlarged to accommodate mechanical equipment within the building.

Providing ground-floor retail space in the landmark building to face the mid-block plaza would require extensive exterior alteration of the landmark building, including the tower portion, to create marketable retail space (see p. 189). Extensive renovation to the exterior could detract from the structure's architectural merit.^{/6/} Further, the ground-floor level of the landmark building has a 10-ft. 10-in. floor-to-floor height. Modern retail space typically has a floor-to-ceiling height of 12 ft.^{/7/}

The additional excavation required to provide three parking levels would require underpinning of the landmark building and would increase the risk of subsidence and damage to this structure (see discussion on p. 192).

NOTES - A. Rincon Hill Plan Alternative

/1/ Dean Macris, Director of City Planning, letter to Norman E. Dean, Hills Bros. Coffee Inc., November 15, 1983. This letter is available for public review at the Department of City Planning, Office of Environmental Review, 450 McAllister St., 5th Floor, San Francisco.

/2/ Allen G. Pastron, President, Archeo-Tec, Consulting Archaeologists, telephone communication, July 31, 1984.

/3/ Lee & Praszker, Geotechnical Consultants, March 1984, Geotechnical Investigation for Hills Plaza, San Francisco, California.

/4/ Walter D. Buehler, President, Buehler & Buehler Associates, Structural Engineers, Inc., letter communication, August 6, 1984.

/5/ Joe E. Erway, CEDEVCO, telephone conversation, August 16, 1984; and Sandra Lambert, Farrella, Braun & Martel, Memorandum, August 6, 1984.

/6/ City Planning Commission Resolution No. 9437 (concerns designation of Two Harrison St. building as a City landmark).

/7/ Kenneth Sproul, Leasing Agent, Fuller Commercial Brokerage, telephone conversation, August 16, 1984.

B. RESIDENTIAL ALTERNATIVE

DESCRIPTION OF ALTERNATIVE

In this alternative, the site would be developed into residential uses, except for the landmark building which would be developed into office space. As with the project, Alternative B would rehabilitate the landmark building and convert it into 217,000 gross sq. ft. of office space and 33,000 gross sq. ft. of parking in the existing basement level. The Hills headquarters employees would occupy about 75,000 sq. ft. of office space in the landmark building. The new residential construction would contain 40,000 gross sq. ft. of ground-floor retail space and 530,000 gross sq. ft. of residential space, containing 500 units with an average living area of about 900 sq. ft. per unit. Total development, exclusive of basement parking would be 787,000 gross sq. ft., 60,000 sq. ft. more than provided in the project.

Alternative B would be developed to conform to the 84, 105, and 200-ft. height limits proposed for the site in the Rincon Hill Plan. The new residential construction would have an 84-ft. base, a 105-ft. mid-block element on Spear St., and a 200-ft. tower at the corner of Folsom and Spear Sts. (see Figure 25, p. 196). As with the project, Conditional Use authorization would be necessary for exceptions to bulk requirements above 80 ft. and for construction of a residential use in an M-1 district. As with the project, height reclassifications would be required for the 200 ft. residential tower under the existing City Planning Code.

The 84-ft.-tall base would contain eight floors. Retail space would be located on the ground-level of the base and residential uses on floors two through eight. The building segment on Spear St. would rise two stories above the eight-story base and would contain residential uses in the ninth and tenth floors. Residential uses would also be provided in floors nine through 19 in a 200-ft. tower. As with the project, this alternative would include a publicly accessible mid-block plaza between the landmark building and the new construction. To provide more security and privacy for the residential uses, this plaza would not fan out towards the bay as it would with the project. There would be 7,750 gross sq. ft. less publicly accessible open space than in the project, a total of 30,250 sq. ft. To better serve residential uses, Alternative B would have an interior plaza entirely open to the sky, separated into several courtyards.

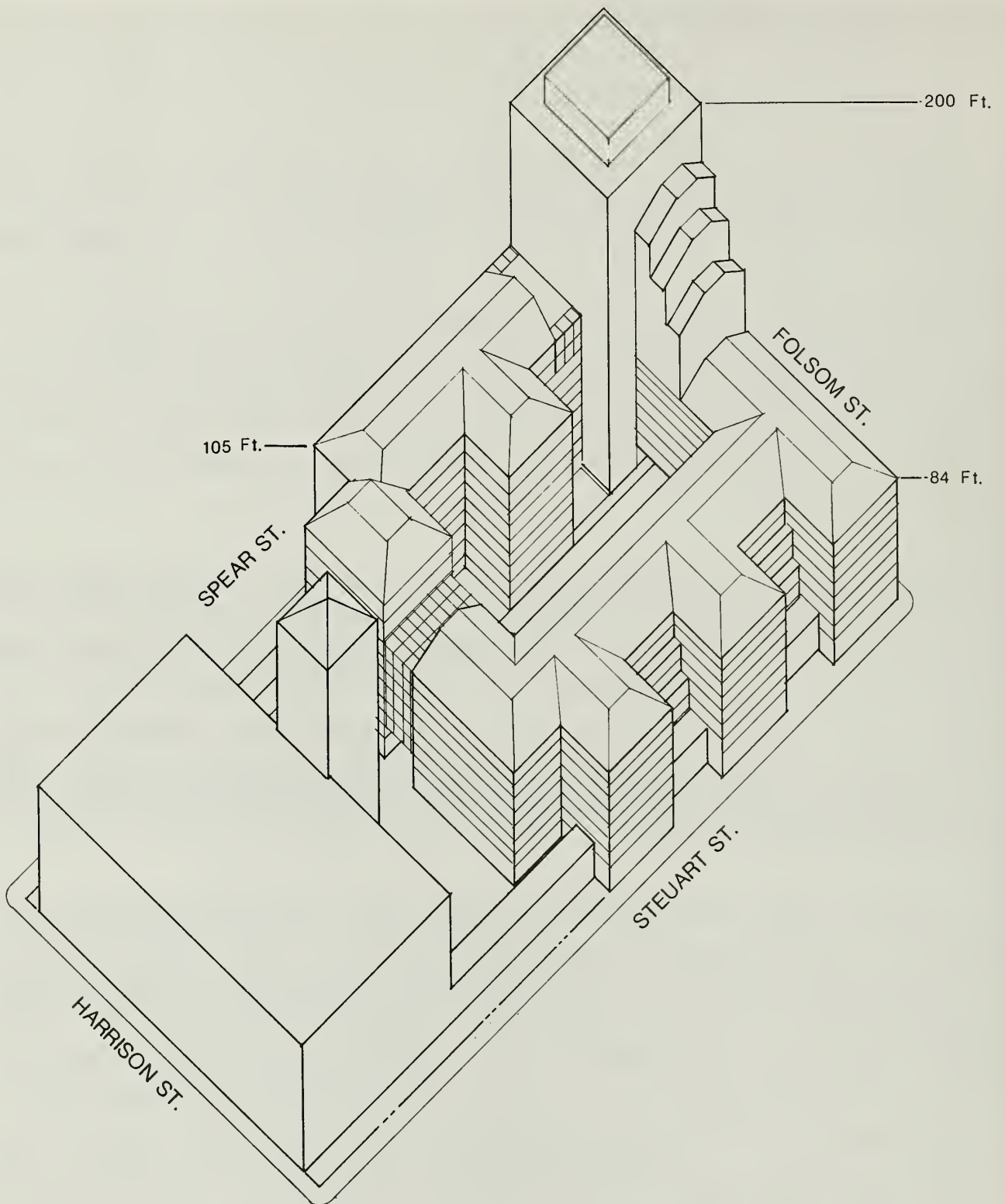


FIGURE 25
B. RESIDENTIAL ALTERNATIVE

SOURCE: Whisler Patri Architects

Alternative B would conform to the proposed parking requirements of the Rincon Hill Plan. Alternative B would be required to provide a minimum of about 220 parking spaces (including one space per four residential units), which could be accommodated in one level underneath the new construction and in the existing basement level of the landmark building. As with the project, vehicles would enter the garage from Folsom St. and exit onto Spear St. Alternative B also would provide the equivalent of five off-street freight loading spaces at the ground-level with access similar to the project from Spear St.

ENVIRONMENTAL IMPACTS

Alternative B would provide a less varied mix of uses at the site, as the principal use (about 70%) would be residential. The Rincon Hill Plan does not prohibit residences as a principal use in the Commercial/Industrial district, but encourages mixed commercial development for this district. The provision of 500 units of housing in this alternative would be more responsive to the Mayor's Six Point Program for Expanding Housing in San Francisco, which encourages development of housing in the Rincon Hill area./1/ The Residential Alternative would appear more bulky than would the project, but would provide transitions in heights as would the project. Shadow effects would be similar to the project, except that shadows from the easternmost portion of the base along Steuart St. would be slightly longer, since Alternative B would not be set back and terraced at this location as would the project.

This alternative would not increase the chance of encountering cultural resources over the project, for the same reasons stated in Alternative A, p. 192.

Transportation, circulation and air quality impacts associated with on-site uses of this alternative would be about 20% less than those of the proposed project. Parking demand from this alternative would be for 750 spaces, 130 more than the parking demand of the project, and 524 spaces more than the minimum space required under the Rincon Hill Plan.

This alternative would demand about 70 Btu per year of energy, about 12% less than the project.

Net direct employment for this alternative would be approximately 670 employees, or about 65% less than the net total employment of the proposed project. Under the January 1982 OHPP guidelines, the net employee-related housing requirement from the landmark building office space would be 126 units, which would be met by the 500 units of housing provided in this alternative. For comparison, the proposed project would have an unmet net housing requirement of about 370 units.

STATUS OF ALTERNATIVE/2/

The project sponsor has rejected Alternative B for the following reasons.

The configuration of the new construction would restrict views and limit privacy in the units facing the interior courtyard; this would limit the project's desirability for residential tenants and, therefore, its economic viability. An All-Residential Alternative also would provide 7,750 fewer sq. ft. of publicly accessible open space than would the project.

Although the minimum parking requirement for an Alternative B would be about 225 spaces (including one space per four dwelling units), the sponsor believes that as with the project, a total of one space per dwelling unit would be needed on-site to successfully market the first new housing in the Rincon Hill Plan Area. This would be the equivalent of 700 parking spaces, requiring excavation for basement parking in four levels under the new construction and in the existing basement of the landmark building.

The increase in open-cut excavation, dewatering and foundation work required to construct the four levels of basement parking would increase the risk of subsidence and damage to the landmark structure.^{/3,4/} The sponsor believes that this geotechnical and foundation work also would substantially increase the construction cost of the project, and could result in more expensive units than is intended for the residential character of Rincon Hill.

The sponsor believes that a mixed-use development would better accommodate and integrate the differing uses in the nearby C-3-O office district, and the surrounding Commerical/Industrial and residential (Midrise and Highrise) districts of the Rincon Hill Plan.

The sponsor believes that to encourage future housing development in the area, it is essential that the first major project within the the Rincon Hill Plan area be successful. The lack of an established residential market, and the expense associated with the provision of additional parking, would make this alternative difficult to market. The sponsor believes that difficulty in marketing one of the anchor projects for the Rincon Hill Plan area would adversely affect private and public efforts to develop the Rincon Hill area.

NOTES - B. Residential Alternative

/1/ San Francisco Department of City Planning, Rincon Hill Plan - A Proposal for Citizen Review, June 1984.

/2/ Joe E. Erway, CEDEVCO, telephone conversation August 16, and Sandra Lambert, Farrella, Braun & Martel, Memorandum, August 6, 1984.

/3/ Walter D. Buehler, President, Buehler & Buehler Associates, Structural Engineers Inc., letter communication, August 6, 1984.

/4/ Lee & Praszker, Geotechnical Consultants, March 1984, Geotechnical Investigation for Hills Plaza, San Francisco, California.

B.1 RESIDENTIAL/RETAIL ALTERNATIVE VARIANT

DESCRIPTION OF ALTERNATIVE

The design of this variant would be the same as the main Residential Alternative. It would differ only by the provision of 80,000 sq. ft. of retail space, instead of 40,000 sq. ft. and 460 units, instead of 500 units as provided in the Residential Alternative.

New construction in this variant would contain a total of 80,000 sq. ft. of retail space in two levels and 490,000 gross sq. ft. of residential space, containing about 460 units, 40 fewer than the main residential atlternative, with an average living area of about 900 sq. ft. The landmark building and tower would be rehabilitated into 217,000 gross sq. ft. of office space, as in the project. The location and number of loading spaces would remain the same as the main Residential Alternative. About 250 parking spaces would be required under the Rincon Hill Plan.

By developing additional retail space on-site, the intent of this variant is to provide not only service retail for proposed on-site workers and residents, but to provide a wider

variety of retail services to support the greater Rincon Hill neighborhood and nearby downtown and waterfront commercial office uses. This retail space would also be intended to provide some city-wide retail services, characteristic of those provided at The Cannery and Ghirardelli Square.

ENVIRONMENTAL IMPACTS

Land-use effects for this variant would be the same as those of the main Residential Alternative, except that more city-oriented retail uses would be provided on site in addition to neighborhood-serving retail. The provision of the additional retail space would meet the intent of the Rincon Hill Plan and Northeastern Waterfront Plan which calls for a mixed-use activity center at the site. Visual quality and shadow effects would be the same as those of Main Residential Alternative. This alternative would have the same effects on cultural resources as would the project.

Transportation and circulation impacts associated with on-site uses would be about 12% higher than the proposed project due to the additional traffic generated by the increased retail activity. A Residential-Retail alternative would generate a parking demand for 740 spaces, 120 more than the project's parking demand, and 485 more than the spaces provided in this alternative. Effects on the landmark building, due to increased excavation of basement parking would be the same as those described for the main Residential Alternative.

This alternative would demand about 70 Btu of energy per year, about 24% less than that required for the project.

Net direct employment for this alternative would be approximately 790 employees, which is approximately 60% less than the net total project employment. The employee-related housing requirement for this variant would be about the same as in the main Residential Alternative.

STATUS OF ALTERNATIVE/1/

In addition to reasons stated for Alternative B (see p. 198-199), this variant to Alternative B was further rejected because the sponsor believes that the additional retail floor area would require more daytime patronage than employees in the landmark building and

surrounding area could provide, and the provision of public access to above ground-level retail would pose security problems.

NOTE - B.1. Residential/Retail Alternative

/1/ Joe E. Erway, CEDEVCO, telephone conversation August 16, and Sandra Lambert, Farrella, Braun & Martel, Memorandum, August 6, 1984.

C. ALL OFFICE ALTERNATIVE

DESCRIPTION OF ALTERNATIVE

Alternative C would rehabilitate the landmark building and tower into 217,000 gross sq. ft. of office space and construct 40,000 gross sq. ft. of ground-floor retail space and 493,000 sq. ft. of office space on the remainder of the site. Total development on the site, including the converted landmark building, would be about 750,000 gross sq. ft. The existing Hills headquarters employees would occupy about 75,000 gross sq. ft. of office space in this alternative. As with the project, Alternative C would be developed under the controls of the M-1 use district in the existing City Planning Code. No height reclassification would be required as the height of Alternative C would be within the existing 105-ft. height limit. Alternative C would include an 80-ft. base with a stepped configuration reaching 105 ft. on the Spear St. frontage. An exemption from bulk limitations for a portion of the project along Spear St. would be required. The design of Alternative C would include a mid-block plaza, an open air courtyard surrounded by six floors of offices, and stepped terraces and balconies (see Figure 26, p. 202). The mid-block plaza would contain about 7,750 less sq. ft. than the project to accommodate additional space for mechanical equipment. To comply with the existing Code, a total of about 1,100 parking spaces would be required. To accommodate this number of spaces, six parking levels would need to be excavated under the new construction in addition to parking provided in the basement of the existing landmark building.

Parking access and egress would be the same as for the project. Alternative C would provide the equivalent of four freight loading spaces at the ground-level with access on Spear St. similar to the project.

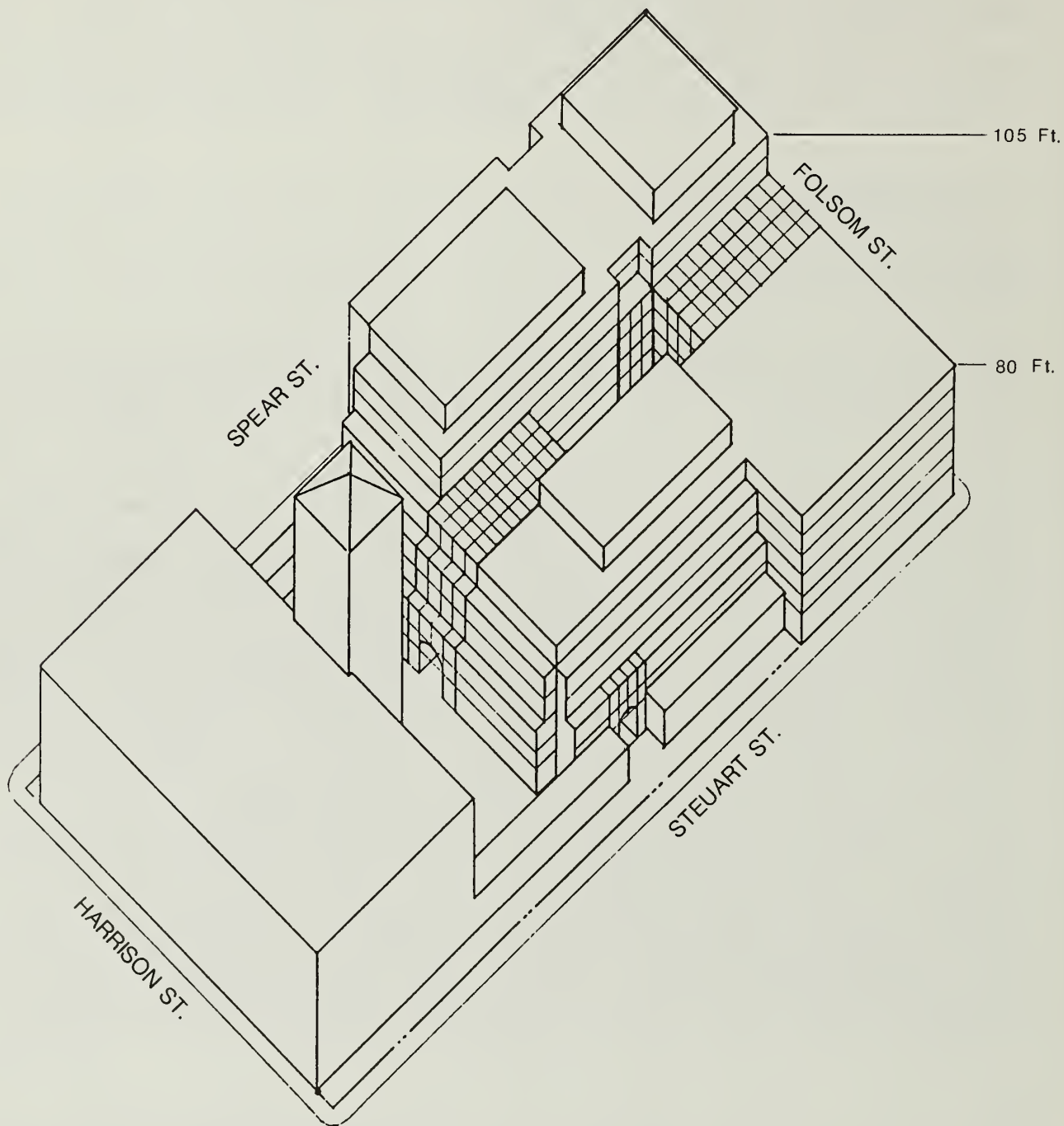


FIGURE 26
C. ALL OFFICE ALTERNATIVE

SOURCE: Whisler Patri Architects

ENVIRONMENTAL IMPACTS

An all-office alternative would not provide the mix of uses called for the site in the Northeastern Waterfront Plan, nor would it reflect the mixed-use character encouraged for the Rincon Hill area by the Rincon Hill Plan.

Visually, Alternative C would be more uniform in height, and would eliminate the 200-ft. tower at Spear and Folsom Sts. Alternative C would not provide a transition in height and scale from highrises north of Folsom St. The 80-ft. height of the base would not continue the cornice line of the landmark building.

Due to the configuration of the site, an all office project would result in a box-like structure with little variation in height. This alternative would provide less public open space and would not conform to the design recommendations for the site provided for the project site by the Planning Department staff./1/

This alternative would eliminate all shadows on the shoreline promenade during late afternoons in March. Some shadows would still occur with this Alternative during late afternoons in December; however, shadows would be substantially shorter than those cast by the project. As with the project, no shadows would be cast on the shoreline promenade during June and September and during the noon hour at anytime of the year.

There would be no change in the effect on cultural resources with this alternative.

The transportation, circulation and air quality impacts of uses on the site would be about 10% higher than the proposed project due to the replacement of the residential component by traffic-generating office uses. The increased number of office workers entering and exiting the parking garage site during the a.m. and p.m. peak hours would most likely produce congestion in the immediate vicinity of the on-site garage entrance and exit. Parking demand generated by this alternative would be for ten more spaces than the demand created by the project, for a total of 630 spaces. The excavation of six levels of basement parking would pose substantial structural risk to the landmark building./2,3/

The total energy demand of this alternative, about 93 billion Btu per year, would be about 1% more than that required by the project.

The net direct employment for this alternative would be approximately 2,600, including 2,310 office workers, or approximately 25% more than the proposed project. Under the January 1982 OHPP guidelines, the housing requirement for Alternative C would be 565 units, 110 units more than the project's requirement. In Alternative C, all housing requirement would be met off-site, as no housing would be included in the development.

STATUS OF ALTERNATIVE/2/

The project sponsor believes that the four additional levels of basement parking required for this alternative would not be feasible due to the water table and other soils conditions, as described on p. 192./3,4/

The reduction in floor-to-floor height required to accommodate the lower base building of 80 ft. would reduce the building's marketability by eliminating the inter-floor spaces required for ducting and utility conduits necessary for state-of-the-art office communications and electronics networks.

NOTES - C. All Office Alternative

/1/ Dean Macris, Director of City Planning, letter to Norman E. Dean, Hills Bros., November 15, 1983; this letter is available for public review at the Department of City Planning, Office of Environmental Review, 450 McAllister St., 5th Floor, San Francisco.

/2/ Joe E. Erway, CEDEVCO, telephone conversation, August 16, 1984, and Sandara Lambert, Farrella, Braun & Martel, Memorandum, August 6, 1984.

/3/ Walter D. Buehler, President, Buehler & Buehler Associates, Structural Eninegers Inc., letter communication, August 6, 1984.

/4/ Lee & Praszker, Geotechnical Consultants, March 1984, Geotechnical Investigation for Hills Plaza, San Francisco, California.

D. NO-PROJECT ALTERNATIVE

DESCRIPTION OF ALTERNATIVE

Alternative D would entail no physical changes to any of the seven buildings which exist on the site, and assumes that relocation of existing coffee manufacturing uses at the site

would be completed, as scheduled, by the end of 1985. The Hills landmark building could continue to be occupied by Hills' headquarters offices, which occupies about 62,400 gross sq. ft. of office space. Except for the landmark building, existing buildings at the site were designed solely for coffee-processing uses and are not readily adaptable to other industrial uses, and it is unlikely that new industrial uses would occupy or refurbish these vacated buildings once current relocation of coffee manufacturing operations is complete. Therefore, it is expected that the remaining 187,600 gross sq. ft. of space (including 33,000 sq. ft. of basement storage) in the landmark building and 86,800 gross sq. ft. of space in the other six buildings on the site either would remain vacant or be used for storage space by individual tenants. The existing 55 surface parking spaces also are assumed to remain and continue to be used by Hills employees or storage tenants.

ENVIRONMENTAL IMPACTS

None of the effects identified in Section IV, pp. 71-164, would occur. Visual quality, urban design, and cultural resources, and shadows would remain substantially the same as described in the Setting Section of this report. This alternative could represent a reduction in current levels of traffic, parking and transit demand if the site were to become and remain substantially vacant.

Preservation objectives of the City, as stated in the Urban Design and Northeastern Waterfront Elements, would not be achieved as the landmark building would not be rehabilitated and structurally upgraded.

STATUS OF ALTERNATIVE/I/

The project sponsor has rejected Alternative D for the following reasons.

It would not implement the goals and objectives of the Rincon Hill Plan, as would the project. Alternative D would not provide a major mixed-use development in the Rincon Hill Plan area that would help to establish this residential community for the City. Alternative D would eliminate the opportunity for the creation of a mid-block pedestrian crossing from the Rincon Hill Plan Area to The Embarcadero as called for in the Rincon Hill Plan. Preservation of the landmark building, a stated objective of the City would not be achieved with Alternative D.

IX. Alternatives

The sponsor has further rejected the no-project alternative because vacant or partially vacant buildings on the site would invite vandalism and other crimes. This alternative also would not permit the site to be developed to its buildout potential under the existing City Planning Code or the proposed Rincon Hill Plan.

NOTE - No-Project Alternative

/1/ Joe E. Erway, CEDEVCO, telephone conversation, August 16, 1984, and Sandra Lambert, Farrella, Braun & Martel, Memorandum, August 6, 1984.

X. EIR AUTHORS AND CONSULTANTS; ORGANIZATIONS AND PERSONS CONSULTED

EIR AUTHORS

San Francisco Department of City Planning
450 McAllister Street, 5th Floor
San Francisco, CA 94102
Environmental Review Officer: Alec Bash
Assistant Environmental Review Officer: Barbara W. Sahm
Project Coordinator: Paul Maltzer

EIR CONSULTANTS

Environmental Science Associates, Inc.
1390 Market Street, Suite 215
San Francisco, CA 94102

(Prime Consultant: Project Description; Land Use and Zoning; Architectural Resources; Urban Design and Visual Quality; Cumulative Transportation and Off-street Loading Requirements; Air Quality; Energy; Employment, Housing and Fiscal Factors; Growth Inducement; Community Services and Utilities; Geology, Seismology and Hydrology; Mitigation Measures; and Alternatives to the Proposed Project.)

Associate-in-Charge: Paul Zigman
Technical Reviewer: Nancy Cunningham Clark
Project Manager: Donna Pittman
Senior Transportation Manager: Frederick C. Dock, P.E.
Word Processor-in-Charge: Kimberley K. Gardner
Artist-in-Charge: Robert Suhr

DKS Associates
Transportation Consultants
(Transportation, Circulation
and Parking)
1419 Broadway, #700
Oakland, CA 94612
Alan E. Willis
Michael Aronson

Donald Ballanti
Wind Analysis
1424 Scott Street
El Cerrito, CA 94330

Archeo-Tec
Consulting Archaeologists
(Historic and Archaeological Resources)
114 Wilding Lane
Oakland, CA 94618
Allen G. Pastron, Ph.D.

E. M. Rose & Associates
(Construction Energy and Energy
Policies)
145 Vasquez Avenue
San Francisco, CA 94127
Ed Rose

PROJECT SPONSOR

Hills Bros. Coffee, Inc.
Two Harrison St.
San Francisco, CA 94105
Norman E. Dean, President
Paul Miller, Chairman

SPONSOR'S DEVELOPMENT CONSULTANT

CEDEVCO
1700 I St.
Sacramento, CA 95814
Joe E. Erway
E. W. Christman
Dennis Martello

PROJECT ARCHITECTS

Whisler-Patri Architects
590 Folsom St.
San Francisco, CA 94105
Piero Patri
Albert Murakami
Marie Zeller
Peter Hasselmann
George Millen

LEGAL COUNSEL

Farella, Braun & Martel
236 Montgomery St.
San Francisco, CA 94104
Jeffrey Newman
Dorothy A. Berndt
Sandra Lambert

CIVIL ENGINEER

DKS Associates
1419 Broadway, Suite 700
Oakland, CA 94612-2069
Larry Grove, P.E.

GEOTECHNICAL ENGINEER

Lee and Praszker
147 Natoma St.
San Francisco, CA 94105
Michael Praszker
Richard Rogers

STRUCTURAL ENGINEER

Buehler & Buehler Associates
700 Alhambra Blvd.
Sacramento, CA 95816
Walter Buehler
Patrick Vujovich

MECHANICAL ENGINEER

Syska & Hennessy
575 Mission St.
San Francisco, CA 94105
Mark Redmond

CITY AND COUNTY OF SAN FRANCISCO

Department of City Planning
450 McAllister St.
San Francisco, CA 94102
Dean Macris
Lu Blaje
Richard Hedman
Jonathan Malone
Lois Scott
Diane Oshima
Gail Bloom
Sylvia Williamson

City Attorney
Burk Delventhal
Dianne Berry

Cleanwater Program
Division of Sewer System Design
150 Hayes St.
San Francisco, CA 94102
Nathan Lee, Engineering
Associate II

Fire Department
Support Services
260 Golden Gate Ave.
San Francisco, CA 94102
Edward J. Phipps,
Assistant Chief

San Francisco Municipal Railway
949 Presidio Ave.
San Francisco, CA 94115
Peter Strauss, Planning Division

San Francisco Public Utilities
Commission
Finance Department
425 Mason St.
San Francisco, CA 94101
Bruce Bernhard, Chief Accountant

San Francisco Public Utilities
Commission
Planning and Development
949 Presidio Ave., Room 150
San Francisco, CA 94115
Ronald Niewiarkowsky

Police Department
850 Bryant St.
San Francisco, CA 94103
James Farrell, Sergeant

Port of San Francisco
Ferry Building
San Francisco, CA 94102
Randall Rossi

San Francisco Recreation and Parks
Department
McLaren Lodge
Golden Gate Park
San Francisco, CA 94117
Timothy Lillyquist

Department of Public Works
Bureau of Engineering
460 McAllister St.
San Francisco, CA 94102
Scott Shoaf, Division of Traffic

Water Department
City Distribution Division
1990 Newcomb Ave.
San Francisco, CA 94124
Harlow Swain, Senior District
Water Serviceman

Tax Assessor's Office
City Hall
San Francisco, CA 94102

OTHER ORGANIZATIONS

San Francisco Redevelopment Agency
939 Ellis St.
San Francisco, CA 94104
Frank Cannizzaro

Pacific Gas and Electric Company
245 Market St.
San Francisco, CA 94106
Rocco Colicchia
Industrial Power Engineer

Bay Area Rapid Transit District
800 Madison St.
San Francisco, CA 94607
Ward Belding

Building Owners and Manager
Association
690 Market St.
San Francisco, CA 94104
Elmer Johnson

XI. DISTRIBUTION LIST

STATE AGENCIES

General Projects Section
Air Resources Board
P.O. Box 2815
Sacramento, CA 95814
Attn: Don Rake

State Office of Intergovernmental
Management (10)
State Clearinghouse
1400 - Tenth Street
Sacramento, CA 95814
Attn: Anna Polvos (10c)

REGIONAL AGENCIES

Association of Bay Area Governments
P.O. Box 2050
Oakland, CA 94604

Bay Area Air Quality Management
District
939 Ellis Street
San Francisco, CA 94109
Attn: Irwin Mussen

California Archaeological Site Survey
Regional Office
Northwest Information Center
Department of Anthropology
Sonoma State University
Rohnert Park, CA 94928

California Department of Transportation
Business and Transportation Agency
P.O. Box 7310
San Francisco, CA 94120
Attn: Darnall W. Reynolds,
District CEQA Coordinator

California Department of Transportation
Public Transportation Branch
P.O. Box 7310
San Francisco, CA 94120
Attn: Larry Layne

CITY AND COUNTY OF SAN FRANCISCO

Bureau of Building Inspection
450 McAllister Street
San Francisco, CA 94102
Attn: Robert Levy, Superintendent

City Attorney's Office
Room 206 City Hall
San Francisco, CA 94102
Attn: Paula Jesson, Deputy City
Attorney

Landmarks Preservation Advisory Board
450 McAllister Street
San Francisco, CA 94102
Attn: Jonathan H. Malone
Patrick McGrew, President
Philip Choy
Elizabeth de Losada
David M. Hartley
Carolyn Klemeyer
Jean Kortum, Vice President
John Ritchie
Ann Sabiniano
Walter Sontheimer

Mayor's Economic Development Council
100 Larkin St.
San Francisco, CA 94102
Attn: Bill Witte, Director

Port of San Francisco
Ferry Building
San Francisco, CA 94111
Attn: Randall Rossi

Public Utilities Commission
949 Presidio Ave., Room 150
San Francisco, CA 94115
Attn: Tom Jordon, Director
Bureau Services

Public Utilities Commission
Bureau of Energy Conservation
949 Presidio Ave., Room 111
San Francisco, CA 94115
Attn: Barbara Moy, Assistant
Director

Recreation & Park Dept., McLaren Lodge
Golden Gate Park
Fell and Stanyan Streets
San Francisco, CA 94117
Attn: Deborah Lerner

San Francisco Bureau of Engineering
Streets and Highways
45 Hyde St., Room 212
San Francisco, CA 94102

San Francisco City Planning Commission
450 McAllister Street
San Francisco, CA 94102
Attn: Lee Woods, Secretary
Commissioners:
Tony Rosenblatt, President
Susan Bierman
Roger Boas
Norman Karasick, Alt.
Jerome Klein
Yoshio Nakashima
C. Mackey Salazar
Rudy Nothenberg
Douglas G. Wright, Alt.

San Francisco Dept. of Public Works
Traffic Engineering Division
460 McAllister Street
San Francisco, CA 94102
Attn: Scott Shoaf

San Francisco Fire Department
260 Golden Gate Avenue
San Francisco, CA 94102
Attn: Ed Phipps, Chief
Division of Planning & Research

San Francisco Municipal Railway
MUNI Planning Division
949 Presidio Avenue, Room 204
San Francisco, CA 94115
Attn: Peter Straus

San Francisco Real Estate Dept.
450 McAllister Street, Room 600
San Francisco, CA 94102
Attn: Mr. Wallace Wortman,
Director of Property

San Francisco Water Department
Distribution Division
425 Mason St.
San Francisco, CA 94102
Attn: George Nakagaki, Manager

GROUPS AND INDIVIDUALS

AIA
San Francisco Chapter
790 Market St.
San Francisco, CA 94102

Steve Anderson
Chatter Commercial Brokerage Co.
Market Research Department
Two Embarcadero, #1860
San Francisco, CA 94111

Alice Suet Yee Barkley
Bennet & Barkley
100 California St., Suite 970
San Francisco, CA 94111

Bay Area Council, Inc.
348 World Trade Center
San Francisco, CA 94111

Albert Beck
c/o Geography Department
California State University, Chico
Chico, CA 95929

Bendix Environmental Research, Inc.
1390 Market St., Suite 902
San Francisco, CA 94102

Tony Blaczek
Finance Department, Coldwell Banker
1 Embarcadero Center, 23rd Floor
San Francisco, CA 94111

John Bonin, Knowlton Realty Ltd.
Embarcadero Center, Suite 2720
San Francisco, CA 94111

XI. Distribution List

Peter Bosselman
Environmental Simulation Laboratory
119 Wurster Hall
University of California
Berkeley, CA 94720

Roger Boyer Associates
215 Leidesdorf
San Francisco, CA 94111
Attn: Anita

Brobeck, Phleger, Harrison
One Market Plaza
San Francisco, CA 94105
Attn: Jonnie T. Jacobs, Esq.

Michael Buck
1333 35th Ave.
San Francisco, CA 94122

David Capron
Lincoln Property Company
222 Sansome St.
San Francisco, CA 94104

Dale Carlson
369 Pine St., #800
San Francisco, CA 94104

Charter Commercial Brokerage Co.
Market Research Department
Two Embarcadero, #1860
San Francisco, CA 94111

Chickering & Gregory
3 Embarcadero Center, 23rd Floor
San Francisco, CA 94111
Attn: Kent Soule

Coalition for San Francisco Neighborhoods
175 Yukon St.
San Francisco, CA 94114
Attn: Dorice Murphy

Joseph Cortiz
2853 22nd St.
San Francisco, CA 94110

Calvin Dare
Cushman Wakefield
555 California St., #2700
San Francisco, CA 94104

Alex Diamondidis
#58 Varnnes
San Francisco, CA 94133

Rita Dorst
RB International Services
9 Boston Ship Plaza
San Francisco, CA 94111

Downtown Association
582 Market St.
San Francisco, CA 94105
Attn: Lloyd Pflueger

Downtown Senior Social Services
295 Eddy St.
San Francisco, CA 94102

Michael Dyett
Blayney-Dyett
70 Zoe St.
San Francisco, CA 94103

Environmental Impact Planning Corp.
319 Eleventh St.
San Francisco, CA 94103
Attn: Susanne McAdams

Environmental Planning & Research, Inc.
649 Front St.
San Francisco, CA 94111
Attn: Leslie de Boer

Friends of the Earth
1045 Sansome Street #404
San Francisco, CA 94111
Attn: Connie Parrish

The Foundation for S. F. Arch. Heritage
2007 Franklin Street
San Francisco, CA 94109
Attn: H. Grant Dehart,
Executive Director

Charles T. Gill
The Aspen Group West, Inc.
505 Sansome St., Suite 1005
San Francisco, CA 94111

XI. Distribution List

Annette M. Granucci
Commercial News Publishing Co.
125 Twelfth St.
San Francisco, CA 94103

Gray Panthers
944 Market St.
San Francisco, CA 94102
Attn: W. Nunnally

Gruen, Gruen & Associates
564 Howard St.
San Francisco, CA 94105

James D. Hall
101 Lombard Condominiums
San Francisco, CA 94111

Donald Head & Associates
109 Minna St., #293
San Francisco, CA 94105

Heller, Ehrman, White & McAuliffe
44 Montgomery St., 32nd floor
San Francisco, CA 94104
Attn: Robert L. Gibney, Jr.

Valerie Hersey
Munsell Brown
950 Battery St.
San Francisco, CA 94111

Sue Hestor
4536 - 20th Street
San Francisco, CA 94114

Hillman Properties West, Inc.
150 Fourth Street
San Francisco, CA 94103
Attn: Thomas Heavey

Carl Imparato
1205 Garfield
Albany, CA 94705

Jefferson Associates, Inc.
683 McAllister Street
San Francisco, CA 94102
Attn: Gordon Jacoby

Jones Lang Wootton
710 One Embarcadero Center
San Francisco, CA 94111
Attn: Sheryl Bratton

League of Women Voters
12 Geary St., Room 605
San Francisco, CA 94108

Lee & Fan
Architecture & Planning, Inc.
580 Market st., Suite 300
San Francisco, CA 94104
Attn: Robert Fan, Jr.

Legal Assistance to the Elderly
333 Valencia St.
San Francisco, CA 94103
Attn: Brent Kato

Carole Lester
Lawyers Title Company of San Francisco
300 Montgomery St., Suite 1135
San Francisco, CA 94104

Barry Livingston
Urban Center Development Limited
One Embarcadero Center, Suite 2216
San Francisco, CA 94111

Doug Longear
Finance Department
Coldwell Banker
1 Embarcadero Center, 23rd floor
San Francisco, Ca 94111

Marathon U.S. Realities, Inc.
595 Market St., Suite 1330
San Francisco, CA 94105
Attn: Rolf Wheeler

Robert Meyers Associates
582 Market St., Suite 1208
San Francisco, CA 94104

Pacific Gas & Electric
77 Beale St., #2429
San Francisco, CA 94104

Kay Pachtner
Consumer Action
1417 Irving St.
San Francisco, CA 94122

Pacific Telephone & Telegraph
140 New Montgomery St.
San Francisco, CA 94105

XI. Distribution List

Charles Hall Page and Associates
364 Bush St.
San Francisco, CA 94104

Pillsbury, Madison & Sutro
P.O. Box 7800
San Francisco, CA 94120
Attn: Susan Pearlstine

Planning Analysis and Development
530 Chestnut St.
San Francisco, CA 94133
Attn: Gloria Root

Mrs G. Bland Platt
339 Walnut St.
San Francisco, CA 94118

Research & Decisions Corporation
375 Sutter St., Suite 300
San Francisco, CA 94108
Attn: Deborah McNamee

Rin Ten Ten
29 Guy Place
San Francisco, CA 94015
Attn: Gene De Mar

David Rhoades
120 Montgomery St., Suite 1600
San Francisco, CA 94104

San Francisco Beautiful
41 Sutter Street
San Francisco, CA 94104
Attn: Mrs. H. Klussman, President

San Francisco Building and
Construction Trades Council
400 Alabama Street, Room 100
San Francisco, CA 94110
Attn: Stanley Smith

San Francisco Chamber of Commerce
465 California Street
San Francisco, CA 94105
Attn: Richard Morten

San Francisco Convention & Visitors
Bureau
201 Third Street, Suite 900
San Francisco, CA 94103
Attn: George Kirkland, Executive
Director

San Francisco Ecology Center
13 Columbus Avenue
San Francisco, CA 94111

San Francisco Forward
690 Market St.
San Francisco, CA 94104
Attn: Frank Noto

San Francisco Junior Chamber of
Commerce
251 Kearny St.
San Francisco, CA 94104

San Francisco Labor Council
1855 Folsom Street
San Francisco, CA 94103
Attn: Bernard Speckman

San Francisco Organizing Project
1208 Market St.
San Francisco, CA 94102

San Francisco Planning &
Urban Research Association
312 Sutter Street
San Francisco, CA 94108

San Franciscans for Reasonable Growth
241 Bartlett Street
San Francisco, CA 94110
Attn: David Jones

San Francisco Redevelopment Agency
939 Ellis St.
San Francisco, CA 94102
Attn: Tom Conrad

San Francisco Tomorrow
942 Market, Room 505
San Francisco, CA 94102
Attn: Tony Kilroy

John Sanger & Associates
3600 Washington St.
San Francisco, CA 94118

Senior Escort Program
South of Market Branch
814 Mission Street
San Francisco, CA 94103
Attn: Neighborhood Coordinator

Sierra Club
530 Bush Street
San Francisco, CA 94105
Attn: Becky Evans

South of Market Alliance
74 Langton Street
San Francisco, CA 94103

Square One Film & Video
725 Filbert st.
San Francisco, CA 94133

Wayne E. Stiefvater, President
Appraisal Consultants
701 Sutter St.
San Francisco, CA 94109

Tenants and Owners Development Corp.
230 - Fourth Street
San Francisco, CA 94103
Attn: John Elberling

Rod Teter
Cahill Construction Company
425 California St., Suite 2300
San Francisco, CA 94103

Jerry Tone, Loan Officer
Real Estate Industries Group
Wells Fargo Bank, N.A.
475 Sansome St., 19th floor
San Francisco, CA 94111

Tosta & Browning
333 Market St., Suite 2230
San Francisco, CA 94105
Attn: Timothy A. Tosta

Jeff Vance
Campeau Corp. of Calif.
681 Market St.
San Francisco, CA 94105

Kathy Van Velsor
19 Chula Lane
San Francisco, CA 94114

Ron Watkins Properties, Inc.
4740 Folsom Blvd., Suite A
Sacramento, CA 94819

Steven Weicker
899 Pine St., #1610
San Francisco, CA 94108

Howard Wexler
235 Montgomery St., 27th floor
San Francisco, CA 94104

Eunice Willette
1323 Gilman Ave.
San Francisco, CA 94124

Leslie Yee
1531 Powell St.
San Francisco, CA 94133

ABUTTING PROPERTY OWNERS

3740/32, 3741/11, 27, 3745/1
CALTRANS - Right-of-Way Division
P.O. Box 7310
San Francisco, CA 94120
Attn: Ruel Speck

3740/31
Martin C. Levin Inv. Co.
658 Howard Street
San Francisco, CA 94105

3741/29
William & Dorothy Blake
264 Mallorca Way
San Francisco, CA 94123

3741/28
Thomas & Lucille Feeney
264 Mallorca Way
San Francisco, CA 94123

3742/10
Terminals Equipment Co.
289 Steuart Street
San Francisco, CA 94105

3743/1
Port of San Francisco
Property Department - Ferry Building
San Francisco, CA 94111
Attn: Dorothy Schimke

3745/29

Fred Karren
Fitzpatrick Karren Associates
1433 Webster St.
Oakland, CA 94612

3768/1

Atchison, Topeka & Santa Fe Railroad
Property Improvement Department
114 Sansome Street
San Francisco, CA 94104

3745/8

General Services Administration
Real Property Disposal
525 Market St.
San Francisco, CA 94015

3769/2A

JMC Holdings, Inc.
c/o Darlene Clark, Wilmington Trust Ctr.
100 West 10th, #106
Wilmington, DE 19801

MEDIA

Leland S. Meyerzove
KPOO - FM
P.O. Box 6149
San Francisco, CA 94101

San Francisco Bay Guardian
2700 - Nineteenth Street
San Francisco, CA 94110
Attn: Patrick Douglas, City Editor

San Francisco Chronicle
925 Mission Street
San Francisco, CA 94103
Attn: Evelyn Hsu

San Francisco Examiner
P.O. Box 7260
San Francisco, CA 94120
Attn: Gerald Adams

San Francisco Progress
851 Howard Street
San Francisco, CA 94103
Attn: E. Cahill Maloney

The Sun Reporter
1366 Turk Street
San Francisco, CA 94115

Tenderloin Times
146 Leavenworth Street
San Francisco, CA 94102
Attn: Rob Waters

LIBRARIES

Cogswell College Library
600 Stockton St.
San Francisco, CA 94108

Environmental Protection Agency Library
215 Fremont St.
San Francisco, CA 94105
Attn: Jean Circiello

Hastings College of the Law Library
200 McAllister St.
San Francisco, CA 94102-4978

Institute of Government Studies
1209 Moses Hall
University of California
Berkeley, CA 94720

San Francisco Public Library
Main Branch, Documents Section
208 Larkin St.
San Francisco, CA 94102
Attn: Faith Van Liere

Government Publications Department
San Francisco State University
1630 Holloway Ave.
San Francisco, CA 94132

Government Documents Section
Stanford University
Stanford, CA 94305

XII. APPENDICES

LIST OF APPENDICES

	<u>Page</u>
A. Final Initial Study	A-2
B. Architectural Resources	A-30
C. Cumulative Office Development in Downtown San Francisco	A-32
D. Transportation	A-42
E. Air Quality	A-53
F. Applicable Criteria for Planned Unit Developments	A-54

LIST OF TABLES

C-1 Projects Completed Before 1984	A-34
C-2 Cumulative Office Development in Downtown San Francisco as of March 10, 1984	A-36
C-3 Major Office Building Construction in San Francisco Through 1983, in Gross Square Feet	A-40
D-1 Pedestrian Flow Regimen	A-42
D-2 Passenger Levels of Service on Bus Transit	A-45
D-3 Vehicular Levels of Service at Signalized Intersections	A-50
D-4 Traffic Levels of Service for Freeways	A-51
E-1 San Francisco Air Pollutant Summary 1981-1983	A-52

LIST OF FIGURES

D-1 Photos of Pedestrian Flow Levels	A-43
D-2 Photos of Muni Peak Loading Conditions	A-46

APPENDIX A: FINAL INITIAL STUDY*

HILLS PLAZA - SAN FRANCISCO

81.41E

June 1, 1984

* Differences among data presented in the following Initial Study and the preceding EIR are attributable to the availability of additional and more precise data during the subsequent preparation of the EIR.



DEPARTMENT OF CITY PLANNING 450 McALLISTER STREET • SAN FRANCISCO CALIFORNIA 94102

NOTICE THAT AN
ENVIRONMENTAL IMPACT REPORT
IS DETERMINED TO BE REQUIRED

Date of this Notice: June 1, 1984

Lead Agency: City and County of San Francisco, Department of City Planning
450 McAllister Street - 5th Floor, San Francisco, CA 94102

Agency Contact Person: Paul Maltzer Telephone: (415) 558-5261

Project Title: 84.41E Hills Plaza Project Sponsor: Hills Bros. Coffee, Inc.

Project Contact Person: CEDEVCO - Joe E. Erway

Project Address: Two Harrison Street

Assessor's Block(s) and Lot(s): Block 3744, Lot 1.

City and County: San Francisco

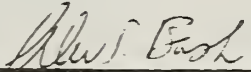
Project Description: Rehabilitation and conversion of office and coffee processing uses in the existing Hills Bros. Coffee, Inc. landmark building; and construction of office residential, support retail, and open space uses. Total development would consist of 587,000 sq.ft. of offices, 100,000 sq.ft. of housing (85 units), 40,000 sq.ft. of support retail and 200,000 sq.ft. of parking. The landmark building at Two Harrison St. would be retained; the remaining six buildings on the site would be demolished.

THIS PROJECT MAY HAVE A SIGNIFICANT EFFECT ON THE ENVIRONMENT AND AN ENVIRONMENTAL IMPACT REPORT IS REQUIRED. This determination is based upon the criteria of the Guidelines of the State Secretary for Resources, Sections 15063 (Initial Study), 15064 (Determining Significant Effect), and 15065 (Mandatory Findings of Significance), and the following reasons, as documented in the Environmental Evaluation (Initial Study) for the project, which is attached.

Please see attached Initial Study.

Deadline for Filing of an Appeal of this Determination to the City Planning Commission: June 11, 1984.

An appeal requires: 1) a letter specifying the grounds for the appeal, and;
2) a \$35.00 filing fee.


ALEC S. BASH, Environmental Review Officer

INITIAL STUDY
HILLS PLAZA (84.41E)

I. PROJECT DESCRIPTION

Hills Bros. Coffee, Inc. (Hills), proposes to develop office, residential, retail, and open space uses on Assessor's Block 3744, Lot 1, bounded by Folsom, Steuart, Harrison and Spear Sts. (see Figure 1, p. 2). The project site is located at the foot of Rincon Hill in the northeastern waterfront area of San Francisco.

The 151,250-sq.-ft. site contains seven buildings and a surface-level parking lot, all of which are currently occupied by Hills' world headquarters offices and coffee manufacturing operations. The Two Harrison St. building and tower are a City landmark. These structures occupy the southern third of the site, and contain approximately 62,400 gross sq. ft. of office uses and 187,600 gross sq. ft. of coffee manufacturing and warehouse uses. The landmark building would be rehabilitated and converted into office use, totaling 217,000 gross sq. ft. of office, and 33,000 gross sq. ft. of parking. The six buildings which occupy the northern portions of the site contain about 86,800 total gross sq. ft. of coffee manufacturing uses; these buildings would all be demolished as part of the project. New construction on this portion of the site would include about 370,000 sq. ft. of office space; 40,000 sq. ft. of ground-level support-retail space; 100,000 sq. ft. of residential space (85 units); and 167,000 sq. ft. of parking. The project would result in a net increase of 524,600 gross sq. ft. of office space at the site. Table 1 summarizes proposed uses at the project site.

TABLE 1: GROSS SQUARE FOOTAGE OF FLOOR AREA BY TYPE OF USE PROPOSED

<u>Use</u>	<u>Rehabilitation</u>	<u>New Construction</u>	<u>Total</u>
Office	217,000	370,000	587,000
Support Retail	--	40,000	40,000
Residential (85 units)	--	100,000	100,000
Subtotal	<u>217,000</u>	<u>510,000</u>	<u>727,000</u>
Parking	33,000	167,000	200,000
TOTAL*	<u>250,000</u>	<u>677,000</u>	<u>927,000</u>

* Totals do not include approximately 42,500 sq. ft. of mechanical space.

SOURCE: Whisler-Patri Architects

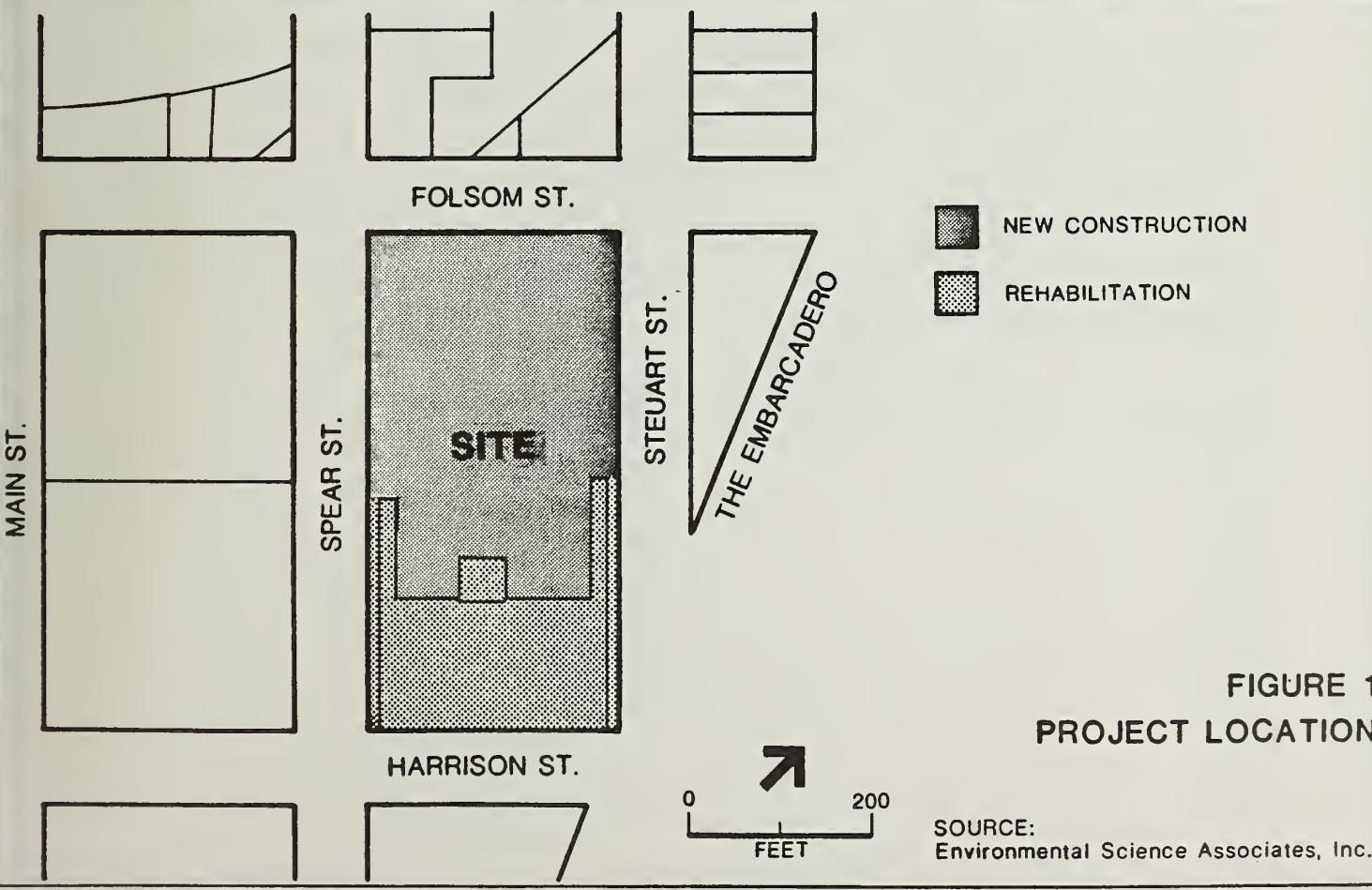
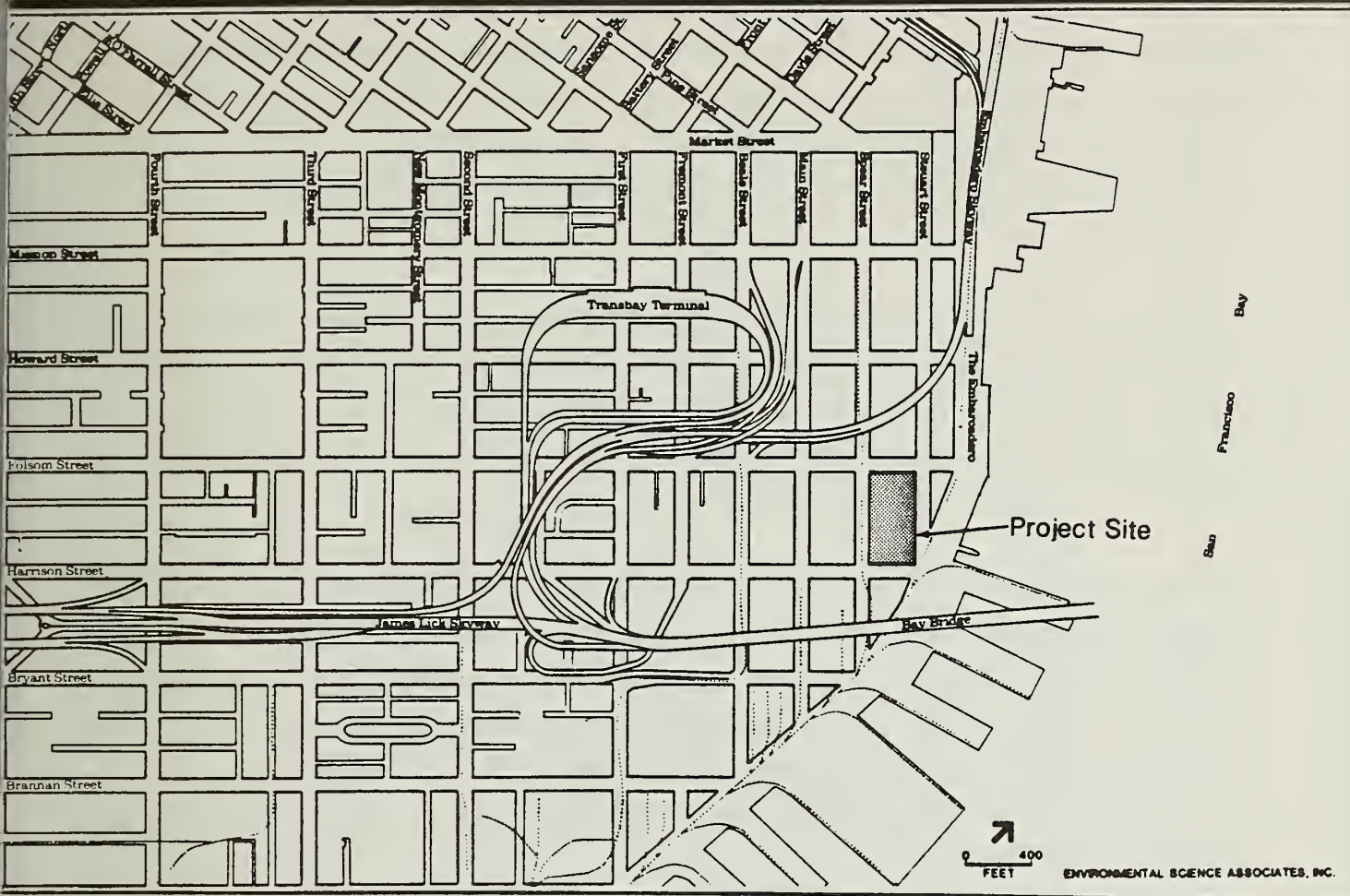


FIGURE 1
PROJECT LOCATION

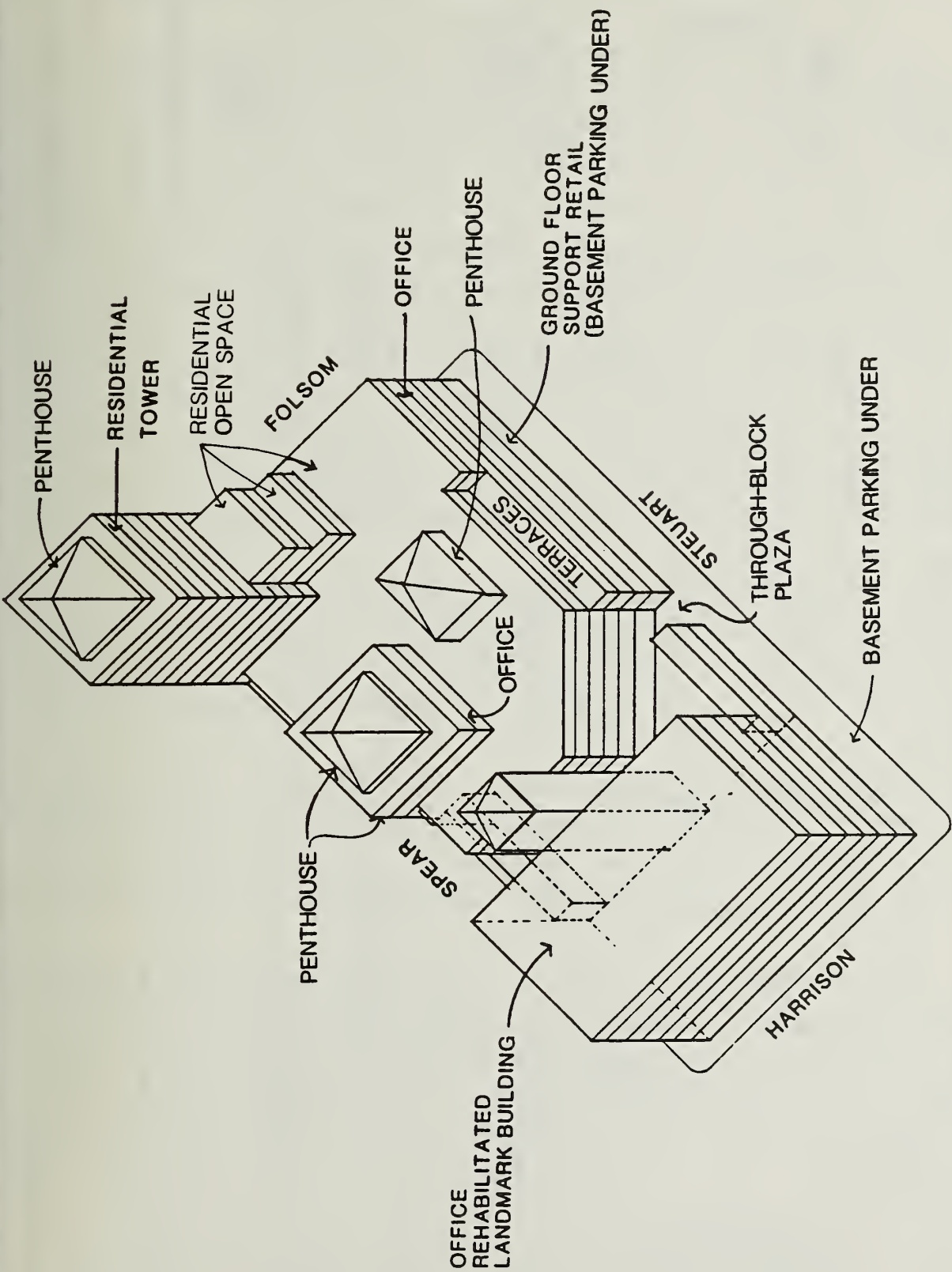
Existing coffee manufacturing, production, and packaging uses at the site would be discontinued or consolidated with operations at the existing Hills coffee plant at Mariposa and Arkansas Sts. in San Francisco. The project site would continue to be used for the world headquarters offices of Hills Bros. Coffee, Inc.

The 85-ft.-tall landmark building is six stories, and is flanked to the north by a 175-ft.-tall tower (campanile). The interior of the landmark structure would be completely renovated for conversion into office space, including structural bracing. Some interior floor area would be removed to create a first-floor courtyard open to the sky.

The new construction would consist of an 84-ft., six-story base building with a seven-story tower mid-block on Spear St. all for retail and office uses, and an eleven-story (200-ft.) residential tower at the corner of Spear and Folsom Sts. (See Figure 2, p. 4.) A publicly accessible plaza would extend east-west through the block between the landmark building and new construction; a north-south pedestrian spine would lead from Folsom St. to the through-block plaza (see Figure 3, p. 5).

Approximately 410 parking spaces would be provided in two basement levels under the new construction, and in one existing basement level under the landmark building. Vehicles would enter the garage from Folsom St. and exit onto Spear St. Enclosed, off-street loading would be provided by four truck loading and two van spaces, accessed from Spear St. near Folsom. The two existing loading spaces on Spear St. near Harrison would continue to serve the landmark building (see Figure 3, p. 5).

The project architects are Whisler-Patri of San Francisco.



OPEN -AIR COURTYARDS IN THE LANDMARK BUILDING AND NEW CONSTRUCTION ARE NOT SHOWN, SEE FIGURE 3.

FIGURE 2
ISOMETRIC VIEW OF PROJECT

SOURCE: Whistler-Patri Architects

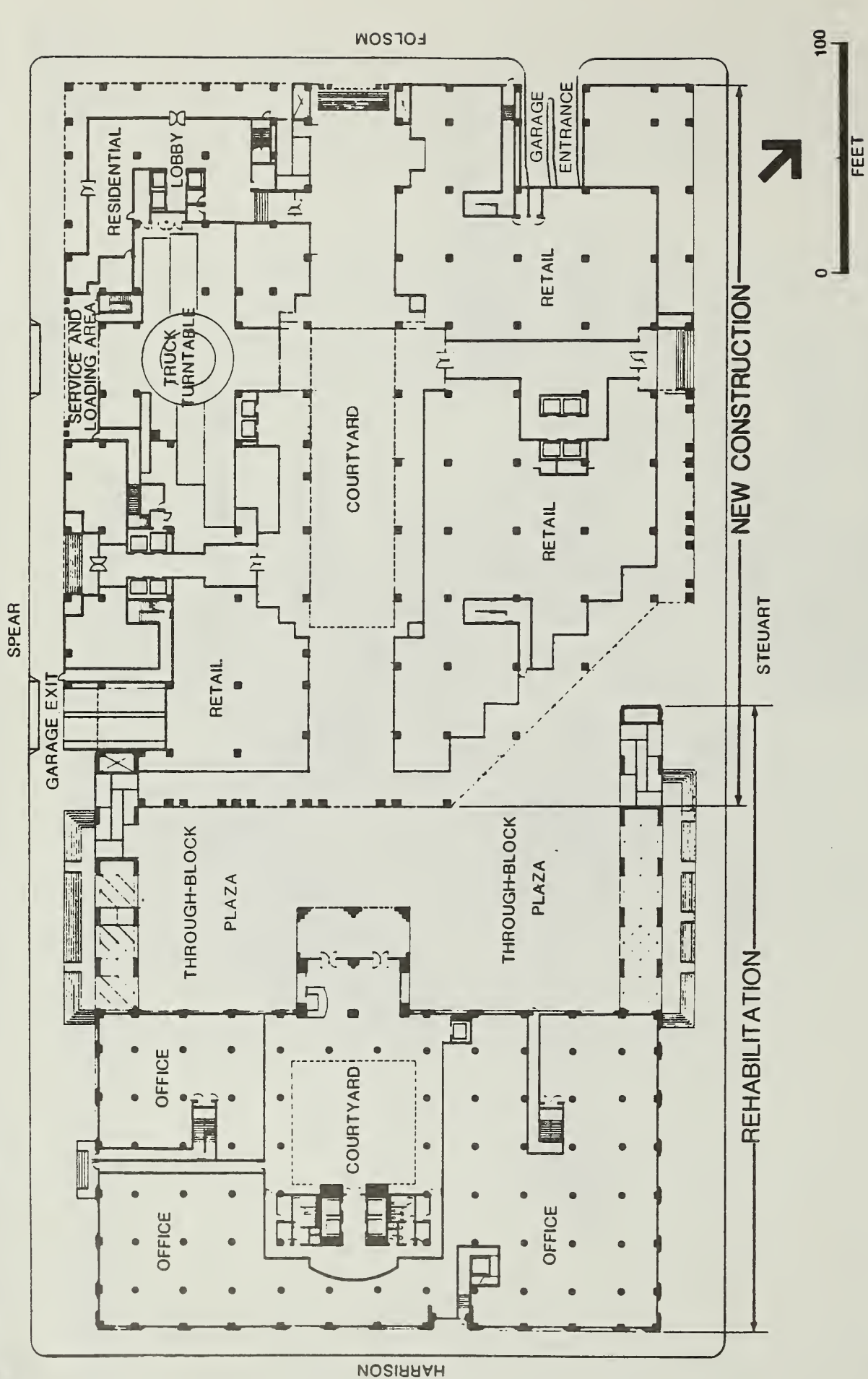


FIGURE 3
GROUND FLOOR PLAN

SOURCE: Whisler-Patri Architects

II. SUMMARY OF POTENTIAL ENVIRONMENTAL EFFECTS

The proposed project is examined in this Initial Study to determine the potential effects on the environment. Some potential effects have been identified as potentially significant and will be analyzed in an Environmental Impact Report (EIR) to be prepared on the project. They include: relationship of the proposed project to the Comprehensive Plan; compatibility of the project with existing zoning and land uses; distant and near views of the project and views affected by the project; relationship of the project to the Comprehensive Plan's Urban Design Element, and to the appearance and scale of surrounding buildings; shadows; housing demand; transportation impacts, both project-specific and cumulative; traffic-generated air quality; cumulative fire protection in the South of Market St. area; energy consumption and conservation; archaeological resources; renovation of the landmark building; and possible growth inducing effects of the project.

The following potential environment impacts were determined either to be insignificant or have been mitigated to an insignificant level through measures included in the project. These items require no further environmental analysis and will not be addressed in the EIR:

Light and Glare: No mirrored glass would be used and the project would conform to City Planning Commission Resolution No. 9212 which restricts the use of mirrored, reflective, and densely tinted glass. Exterior building materials generally would be textured, and would not cause glare.

Employment and Housing Displacement: No employment or housing would be displaced as a result of the project. All existing coffee manufacturing, production, and packaging jobs would be transferred to an existing Hills coffee plant in San Francisco. The current headquarters office jobs would be retained at the site as part of the project. There are no dwelling units on the site, so no housing would be displaced.

Noise: After completion, building operation would not perceptibly increase noise levels in the project vicinity (see pp. 11-12). Operational noise also would be regulated by the San Francisco Noise Ordinance, and Title 25 of the California Administrative Code residential noise insulation requirements. Construction of the proposed building would have short-term effects on noise levels in the project vicinity. Construction equipment and practices would

conform with applicable City ordinances and Department of Public Works recommendations to reduce noise as discussed.

Construction Air Quality: Construction of the proposed project would have short-term effects on air quality in the project vicinity. Mitigation measures are discussed on p. 23.

Wind: The project would not have the potential to cause adverse wind accelerations. Some wind acceleration could be expected to occur along Folsom St. near the 200-ft. residential tower. However, the narrowness of the tower would limit the severity of this acceleration to a level of insignificance (see pp. 16-17).

Public Services and Utilities: The increased demand for public services and utilities attributable to the project would not require additional personnel or equipment with the possible exception of fire protection services which will be discussed in the EIR. Responses of the individual agencies are on file for public review at the Office of Environmental Review, 450 McAllister St., 5th Floor (see p. 17).

Biology: The proposed project would not affect any plants or animals, as the site is completely covered by structures or pavement.

Geology/Topography: A geotechnical report has been prepared by a California-licensed engineer. The project sponsor and contractor would follow the recommendations of this report regarding excavation and construction on the site (see p. 24).

Water: Drainage patterns and water quality would not be altered. In addition to dewatering requirements of the Department of Public Works, a measure to mitigate potential impacts associated with excavation and dewatering would be included in the project (see pp. 24-25).

Hazards: The project would neither cause health hazards nor would it be affected by hazardous uses. A mitigation measure to reduce any possible conflicts with the City's Emergency response plan would be included in the project (see p. 25).

A. COMPATIBILITY WITH EXISTING ZONING AND PLANS.

N/A DISCUSSED

1. Discuss any variances, special authorizations, or changes proposed to the City Planning Code or Zoning Map, if applicable.
- *2. Discuss any conflicts with the Comprehensive Plan of the City and County of San Francisco, if applicable.
- *3. Discuss any conflicts with any other adopted environmental plans and goals of the City or Region, if applicable.

_____	<u> X </u>
_____	<u> X </u>
<u> X </u>	<u> X </u>

The following project actions, to be discussed in the EIR, would be required by the Planning Commission: Conditional Use authorization for construction of a residential use in the M-1 district and for an exception to bulk limits; issuance of a Certificate of Appropriateness for exterior alteration of the Two Harrison landmark building; approval (and recommendation to the Board of Supervisors for approval) of a height (zoning) reclassification for the residential tower; discretionary review; and, possibly, a variance for providing fewer parking spaces than required by the existing City Planning Code. The relationship of the project to policies of the Comprehensive Plan, provisions of the City Planning Code, and the proposed Rincon Hill Plan will be discussed in the EIR. The project would not conflict with other adopted plans and goals; however, issues related to compatibility with zoning and plans will be discussed in the EIR.

B. ENVIRONMENTAL EFFECTS. Could the project:

YES NO DISCUSSED

1. Land Use

- *a. Disrupt or divide the physical arrangement of an established community?
- b. Have any substantial impact upon the existing character of the vicinity?

_____	<u> X </u>	_____
<u> X </u>	_____	<u> X </u>

Surrounding land uses are a mixture of parking, commercial, light industry, vacant parcels, and elevated freeway spans. The relationship of the proposed project to surrounding land uses will be discussed in the EIR.

* Derived from State EIR Guidelines, Appendix G, normally significant effect.

2. Visual Quality

	<u>YES</u>	<u>NO</u>	<u>DISCUSSED</u>
*a. Have a substantial, demonstrable negative aesthetic effect?	<u> </u>	<u> X </u>	<u> X </u>
b. Substantially degrade or obstruct any scenic view or vista now observed from public areas?	<u> </u>	<u> X </u>	<u> X </u>
c. Generate obtrusive light or glare substantially impacting other properties?	<u> </u>	<u> X </u>	<u> X </u>

The surrounding buildings in the project area are mostly one to five stories. The EIR will discuss the near and distant views of the project; its visual aspects; and its relationship to the appearance and scale of surrounding buildings. The project's relationship to the policies of the Urban Design Element of the Comprehensive Plan also will be discussed in the EIR. The project would comply with Resolution No. 9212, concerning mirrored, reflective, or densely tinted glass. The windows of the building would be of bronze or light grey solar glazing; no mirrored glass would be used. The project, in general, would be constructed of textured materials (e.g. brick tile or masonry) and would not be a cause of glare. Glare will not be discussed further in the EIR.

3. Population

	<u>YES</u>	<u>NO</u>	<u>DISCUSSED</u>
*a. Induce substantial growth or concentration of population?	<u> X </u>	<u> </u>	<u> X </u>
*b. Displace a large number of people (involving either housing or employment)?	<u> </u>	<u> X </u>	<u> X </u>
c. Create a substantial demand for additional housing in San Francisco, or substantially reduce the housing supply?	<u> X </u>	<u> </u>	<u> X </u>

No employment or housing would be displaced as a result of the project. All of the existing 150 coffee manufacturing, production, and packaging employees at the site would be transferred to the existing Hills coffee plant at Mariposa and Arkansas Sts. in San Francisco. The current 175 headquarters office workers would continue to work at the site after project completion. During construction on the northern and western portions of the site, these employees would remain in the landmark building, and then would be staged

temporarily into the new construction while the landmark building is rehabilitated. There are no dwelling units on the site, so project construction would not reduce the housing supply. Employment and housing displacement will not be discussed in the EIR. The proposed project would be expected to create a demand for housing in San Francisco, which would be partially met by the 85 units proposed in the project. This will be discussed in the EIR. The EIR will also discuss the potential growth inducing effects of the project.

4. <u>Transportation/Circulation</u>	<u>YES</u>	<u>NO</u>	<u>DISCUSSED</u>
*a. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system?	<u>X</u>	<u> </u>	<u>X</u>
b. Interfere with existing transportation systems, causing substantial alterations to circulation patterns or major traffic hazards?	<u>X</u>	<u> </u>	<u>X</u>
c. Cause a substantial increase in transit demand which cannot be accommodated by existing or proposed transit capacity?	<u>X</u>	<u> </u>	<u>X</u>
d. Cause a substantial increase in parking demand which cannot be accommodated by existing parking facilities?	<u>X</u>	<u> </u>	<u>X</u>

Increased employment, and added retail and residential traffic at the site would increase demand on existing transportation systems, including effects on the existing traffic load and capacity of the street system. The number of pedestrians in the area would also increase. The project would not cause alterations to existing circulation patterns except during construction; its effects on circulation patterns during construction will be discussed in the EIR. Although transportation effects of the project by itself would not be expected to be substantial, the transportation impacts from cumulative development (to which the project would contribute) could have a significant effect. Project-related impacts and cumulative transportation, parking and circulation impacts will be analyzed and described in the EIR. Relevant policies of the Transportation Element of the Comprehensive Plan also will be discussed.

5. <u>Noise</u>	<u>YES</u>	<u>NO</u>	<u>DISCUSSED</u>
*a. Increase substantially the ambient noise levels for adjoining areas?	_____	<u>X</u>	<u>X</u>
b. Violate Title 25 Noise Insulation Standards, if applicable?	_____	<u>X</u>	<u>X</u>
c. Be substantially impacted by existing noise levels?	_____	<u>X</u>	<u>X</u>

Existing Noise Environment

The noise environment of the project site is dominated by vehicular traffic on nearby streets, the Embarcadero Freeway and Bay Bridge. The Environmental Protection Element of the Comprehensive Plan indicates a day-night average noise level (Ldn) of 70 dBA on Folsom and Harrison Sts., and 80 dBA on the Embarcadero Freeway and Bay Bridge as of 1974./1,2/ The Environmental Protection Element contains guidelines for determining the compatibility of land uses with various noise environments. For noise levels of 70 dBA and above, the guidelines recommend that new office construction be undertaken only after a detailed noise analysis, and that new residential construction or development generally be discouraged. Residential construction should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features are included in the design.

Noise measurements taken along Folsom and Harrison Sts. during the weekday p.m. peak hour/3/ indicate an Leq of 70 dBA and an Lmax of 84 dBA on Harrison St., and an Leq of 71 dBA and an Lmax of 81 dBA on Folsom St./4/ Coffee manufacturing, processing, and packaging at the Hills plant is an existing source of noise in the project vicinity. Periods of peak production occur daily from about 9:00 a.m. to 2:30 p.m. During peak production operations, noise levels can (with windows open) reach up to 85 dBA on the four sidewalks surrounding the project site./5/

Operational Noise

Project operation would not increase existing noise levels in the project vicinity, and would, in fact, eliminate noise sources associated with coffee

operations at the site which contribute to noise levels to 85 dBA surrounding the project site (see above). Traffic generated by the proposed project would increase traffic noise by less than one dBA. A one dBA increase in environmental noise is imperceptible to the untrained human ear.

Mechanical equipment for building operation would be regulated by the San Francisco Noise Ordinance, San Francisco Municipal Code, Section 2909, "Fixed Source Noise Levels," which limits noise at the property line to 70 dBA from 7:00 a.m. to 10:00 p.m., and to 60 dBA from 10:00 p.m. to 7:00 a.m. The project sponsor would be required to comply with the ordinance. The proposed project is within about 75 yds. of the Embarcadero Freeway and within about 110 yds. of the Bay Bridge. Noise from these freeways could affect occupants of the proposed buildings, particularly those on the upper floors of the residential tower at Spear and Folsom Sts. Noise levels are higher above the freeway than at ground level, where the freeway structure itself shields the ground level from traffic noise. The residential tower would be subject to Title 25 of the California Administrative Code, which provides standards for maximum interior noise levels in residential units located in areas with an exterior CNEL/2/ of 60 dBA or more. Title 25 Noise Insulation Standards would ensure that indoor noise levels would be low enough to safeguard the health of residents. Specifically, Title 25 requires that a qualified acoustical engineer perform an analysis of the proposed structure and identify measures to be incorporated in the building design and construction to ensure that the interior annualized CNEL does not exceed 45 dBA. Open spaces, such as balconies and courtyards, which are required by the City Planning Code, are not subject to Title 25 and may be subject to ambient noise levels in excess of 70 dBA CNEL, rendering this open space largely unusable. A mitigation measure has been incorporated into the project to minimize noise levels in private residential open space (see p. 22). Operational noise will not be discussed in the EIR.

Construction Noise

Demolition, excavation, construction and renovation would temporarily increase noise in the site vicinity. For the new construction, demolition and site clearance would take about eight weeks; excavation about eight weeks; pile

driving about six weeks; and structural work, interior and exterior finishing about 24 months. Rehabilitation of the landmark building would require about 12 months to complete.

Existing headquarters office workers would remain in the landmark building during construction on the northern portion of the site. These workers would be affected by construction noise, particularly workers in offices on the northern side of the building. Typical construction noise levels, other than for piledriving, range from 78 to 89 dBA at 50 ft./6/; thus workers in the landmark building would experience maximum noise levels of up to 73 dBA with windows open, and 68 dBA with windows closed. In surrounding buildings within 100 ft. of the site, noise levels could reach 72 dBA with windows open, and 67 dBA with windows closed. Surrounding buildings are mostly occupied by light industrial and warehouse uses with openable windows; some commercial uses are at the southwest corner of the intersection of Harrison and Spear Sts. The nearest residents are on Guy Place, five blocks west of the project site; these residents would not be affected by project construction noise.

Conventional unmuffled and unshielded piledrivers emit noise levels of 100 to 110 dBA at a distance of 100 ft. each time the pile is struck. The Noise Ordinance (Sections 2907b and c) limits noise emissions from powered construction equipment other than impact tools and equipment to 80 dBA at a distance of 100 ft. Impact tools and equipment must have intake and exhaust mufflers recommended by the manufacturers and approved by the Director of Public Works as achieving maximum noise attenuation. To date, no muffled and/or shielded piledriver has been approved for use in San Francisco. Thus, use of any impact-type piledriver would be in violation of the ordinance. However, the Department of Public Works allows piledriver operation under certain conditions, which may include specification of a relatively quiet piledriver, predrilling of pile holes, and specification of hours of operation in order to reduce the number of people exposed. Piledriving would occur intermittently over a six week period; actual pounding would occur during a 5 to 15 minute span per pile. Noise levels during piledriving (assuming 100-dBA noise emission at 100 ft.) could reach a maximum of 90 dBA in the landmark building with windows open and 85 dBA with windows closed. In surrounding buildings, workers could experience noise levels of up to 89 dBA with windows open, and 84 dBA with windows closed. Noise levels above 60 dBA can interfere normal speech and concentration, and noise levels above 45 dBA can interfere with sleep.

Vibrations from the impact during piledriving would be felt in the landmark and nearby buildings; these vibrations have been found to be more disturbing to some people than the high noise levels./7/ The project sponsor has agreed to the mitigation measures on p. 23 in order to minimize piledriving and vibration impacts. These temporary construction noise effects will not be discussed in the EIR.

NOTES - Noise

/1/ dBA - Decibel corrected for the variation in frequency response to the typical human ear at commonly encountered noise levels. A decibel is a logarithmic unit of sound intensity. Sound waves traveling outward from a source, exert a force known as sound pressure level (commonly called "sound level") measured in decibels.

/2/ Ldn - An averaged sound level measurement, based on human reaction to cumulative noise exposure over a 24-hour period, which takes into account the greater annoyance of nighttime noises. Noise between 10:00 p.m. and 7:00 a.m. is weighted ten dBA higher than daytime noise. CNEL, the Community Noise Equivalent Level, is similar to Ldn but includes an additional weighting of five dBA for noise between 7:00 p.m. and 10:00 p.m.

/3/ Existing noise levels at the project site are based on noise measurements taken by Environmental Science Associates on Monday, April 23, 1984 between 4:30 p.m. and 5:30 p.m.

/4/ Leq is the equivalent steady-state sound level which is a stated period of time would contain the same acoustic energy as the time-varying sound level during the same time period. Lmax is the maximum noise intensity reach during the period of time of the measurement.

/5/ Noise levels during peak production at the Hills plant are based on noise measurements taken by Environmental Science Associates on Monday, April 23, 1984 between 1:00 p.m. and 2:00 p.m.

/6/ Bolt, Beranek and Newman, December 31, 1971, Noise from Construction Equipment and Operations, Building Equipment and Home Appliances, prepared for the U.S. Environmental Protection Agency.

/7/ The Central Institute for the Deaf, Effects of Noise on People, U.S. EPA, 1971.

6. Air Quality/Climate

YES NO DISCUSSED

- *a. Violate any ambient air quality standard or contribute substantially to an existing or projected air quality violation?

_____ X _____ X

	<u>YES</u>	<u>NO</u>	<u>DISCUSSED</u>
*b. Expose sensitive receptors to substantial pollutant concentrations?	<u> </u>	<u> X </u>	<u> X </u>
c. Permeate its vicinity with objectionable odors?	<u> </u>	<u> X </u>	<u> </u>
d. Alter wind, moisture or temperature (including sun shading effects), so as to substantially affect public areas, or change the climate either in the community or the region?	<u> X </u>	<u> </u>	<u> X </u>

Air quality data collected by the Bay Area Air Quality Management District show that San Francisco experiences infrequent violations of the ambient air quality standards for ozone, carbon monoxide (CO) and total suspended particulates (TSP). Climatic conditions in San Francisco allow rapid dispersal of air pollutants, so that local stationary sources of emissions rarely create a measurable impact at monitoring stations. Rather, their impact is to add to regional accumulation of pollutants.

Two types of air quality impacts could be expected from the proposed building: long-term impacts related to use and operation of the project, and short-term impacts from construction activity. Impacts related to use and operation of the project will be discussed in the EIR.

Construction activities would temporarily affect local air quality. Demolition, earthmoving, and construction activities would affect local air quality, especially total suspended particulates (TSP), for about the first four to six months of construction. Large particulates generated during site preparation and construction would settle quickly and would not be a nuisance or health hazard; fine particulates, less than 30 microns in diameter, would remain suspended for a longer period, and could cause respiratory problems. Dust fall could be expected at times on surfaces within 200 ft. of the site under low winds. No sensitive receptors would be affected by construction air-quality effects, as there are no school or hospital/medical uses in the project vicinity, and the closest residents are located on Guy Place, five blocks west of the project site.

The state 24-hour TSP standard of 100 micrograms per cubic meter would probably be violated on and adjacent to the site several times during construction. The frequency and levels of violation cannot be reliably predicted because they are strongly dependent on meteorological conditions, soil composition on-site, and most importantly, the type and schedule of use of construction machinery employed. Construction activity would vary unpredictably during the period when TSP would most likely cause problems.

The project sponsor has agreed to mitigation measures to reduce particulate emissions generated during construction activities (see pp. 23-24). Construction air quality effects will not be discussed in the EIR.

Wind and Shadow

Existing buildings on the site are one to six stories. Shadows cast on sidewalks and structures near the project site would be increased in some areas by the new construction. A potential open space area in the Rincon Point Redevelopment Area is located east of the site, across The Embarcadero. The new construction would increase shadows cast on the southernmost portions of this potential open space during late afternoons in March, September and December. These effects will be discussed in the EIR; this analysis will include shadow diagrams.

The project does not appear to have the potential for adverse wind accelerations, and a wind tunnel study has not been recommended./1/ Most of the project, except for the residential tower, is low-rise and would not have the potential for adverse wind accelerations at ground level. The residential tower at Folsom and Spear Sts. would be very exposed to winds from the southwest due to the absence of intervening buildings east of the tower site./1/ Some wind acceleration along Folsom St. near the residential tower could be expected; however, the narrowness of the tower would limit the severity of the acceleration to a level of insignificance./1/ The proposed through-block plaza and open air courtyard in the new construction would be situated so that unusually windy conditions would be unlikely./1/ The project effects on the potential open space area east of the site would be unnoticeable./1/

NOTE - Air Quality/Climate

/1/ Donald Ballanti, Certified Consulting Meteorologist, letter, March 18, 1984. Letter is available for public review at the Department of City Planning, Office of Environmental Review, 450 McAllister Street, 5th Floor.

7. <u>Utilities/Public Services</u>	<u>YES</u>	<u>NO</u>	<u>DISCUSSED</u>
*a. Breach published national, state or local standards relating to solid waste or litter control?	_____	<u>X</u>	_____
*b. Extend a sewer trunk line with capacity to serve new development?	_____	<u>X</u>	_____
c. Substantially increase demand for schools, recreation or other public facilities?	_____	<u>X</u>	<u>X</u>
d. Require major expansion of power, water, or communications facilities?	_____	<u>X</u>	_____

Providers of utilities and public services have been contacted and have indicated that existing capacities are adequate to serve the project. The Police Department has suggested that the project incorporate an internal security force to minimize the project's possible impact on the Police Department. The project would incorporate an internal security program, including security stations, staffed with a 24-hour security force; closed circuit televisions; and employee cards and card readers. Statements from service providers are available for public review at the Department of City Planning, Office of Environmental Review, 450 McAllister St., 5th Floor. No further analysis of utilities and police protection is necessary in the EIR. The Fire Department has indicated that with continued development in the South of Market area, it may be necessary for them to reopen a station, possibly within the next five to ten years. The project would conform to Life Safety Provisions of the San Francisco Building Code requiring sprinklers, emergency on-site water storage and generators, thereby minimizing potential fire hazards and the need for fire equipment and personnel. Fire Department service needs due to cumulative development in the South of Market area will be discussed in the EIR.

8. <u>Biology</u>	<u>YES</u>	<u>NO</u>	<u>DISCUSSED</u>
*a. Substantially affect a rare or endangered species of animal or plant or the habitat of the species?	_____	<u>X</u>	_____
*b. Substantially diminish habitat for fish, wildlife or plants, or interfere substantially with the movement of any resident or migratory fish or wildlife species?	_____	<u>X</u>	_____
c. Require removal of substantial numbers of mature, scenic trees?	_____	<u>X</u>	_____
9. <u>Geology/Topography</u>	<u>YES</u>	<u>NO</u>	<u>DISCUSSED</u>
*a. Expose people or structures to major geologic hazards (slides, subsidence, erosion and liquefaction)?	<u>X</u>	_____	<u>X</u>
b. Change substantially the topography or any unique geologic or physical features of the site?	_____	<u>X</u>	<u>X</u>

A portion of the project site is in a Special Geologic Study Area as designated in the Community Safety Element of the Comprehensive Plan. The soils beneath the site are about 10-20 ft. of artificial fill, underlain by 0-40 ft. of bay mud. The bay mud is underlain by shale and sandstone bedrock of the Franciscan Formation. Bedrock directly underlies the fill in the southern part of the site, and dips to about 60 ft. below the surface at its northermost corner./1/

The site is in an area that is known to have liquefied during the 1906 earthquake. Subsidence also has been noted in the project vicinity. Because the project would be supported almost entirely on foundations resting on bedrock, subsidence and liquefaction would have minimal effects on the project./1/

Groundshaking in a 1906-intensity earthquake is expected to be "strong" for all but the northernmost edge of the site, and "very strong" for the northern edge. "Strong" shaking could crack masonry walls and brickwork, while "very strong" shaking could badly crack and occasionally collapse masonry

structures. Modern structures built to the current seismic code, including the proposed project, should be able to withstand shaking at these levels of intensity without severe structural damage or collapse. Some damage and injuries could occur from toppling lamps, bookcases, and other fixtures, and from falling glass. To minimize the existing potential for earthquake damage, the landmark building would be structurally braced, and brought up to current codes for renovation of existing buildings./2/

The northern portion of the site would be excavated to a depth of about 14 ft. below the existing surface, with deeper excavations at elevation pits and certain other locations. About 45,000 cubic yards of material would be removed from the pit and disposed of at an off-site location selected by the excavation contractor./1/ The excavation pit probably would be shored using driven sheet piling or soldier beams and lagging. There would be no excavation under the existing Hills landmark building. Where necessary, a berm would be maintained between the excavation of the new construction and the existing foundations of the landmark building./1/ This berm would reduce the likelihood of adverse effects of excavation on the landmark structure. Geologic hazards and changes to the topography of the site will not be discussed in the EIR.

NOTES - Geology/Topography

/1/ Richard Rodgers, Chief Engineer and Vice President, Lee and Praszker, Consulting Geotechnical Engineers and Geologists, letter, February 17, 1984.

/2/ Walter Buehler, Buehler & Buehler Associates, telephone conversation, May 4, 1984.

10. <u>Water</u>	<u>YES</u>	<u>NO</u>	<u>DISCUSSED</u>
*a. Substantially degrade water quality, or contaminate a public water supply?	_____	<u> X </u>	_____
*b. Substantially degrade or deplete ground water resources, or interfere substantially with ground water recharge?	_____	<u> X </u>	<u> X </u>
*c. Cause substantial flooding, erosion or siltation?	_____	<u> X </u>	_____

The existing water table is at about six to eight ft. below the surface; dewatering of about eight to ten ft. below the surface would be required./1/ Water would be directed to the existing City storm sewer system. As required by the Department of Public Works (DPW), Bureau of Engineering, the sponsor would implement measures to ensure that dewatering would not result in sedimentation in the City storm sewer, or settlement of nearby properties (DPW Standard Specifications, Sections 108.07, 108.17, and 1108.08). This matter will not be discussed in the EIR.

NOTE - Water

/1/ Richard Rodgers, Chief Engineer and Vice President, Lee and Praszker, Consulting Geotechnical Engineers and Geologists, letter, February 17, 1984.

11. <u>Energy/Natural Resources</u>	<u>YES</u>	<u>NO</u>	<u>DISCUSSED</u>
*a. Encourage activities which result in the use of large amounts of fuel, water, or energy, or use these in a wasteful manner?	_____	<u>X</u>	_____
b. Have a substantial effect on the potential use, extraction, or depletion of a natural resource?	_____	<u>X</u>	_____

The project would be designed and constructed to conform with the energy requirements of Title 24 of the California Administrative Code. Converting existing coffee manufacturing, production, and packaging uses at the site to office, retail and residential uses would most likely decrease total energy consumption at the site. Project-generated and cumulative energy consumption and project conservation measures will be discussed in the EIR.

12. <u>Hazards</u>	<u>YES</u>	<u>NO</u>	<u>DISCUSSED</u>
*a. Create a potential public health hazard or involve the use, production or disposal of materials which pose a hazard to people or animal or plant populations in the area affected?	_____	<u>X</u>	_____
*b. Interfere with emergency response plans or emergency evacuation plans?	_____	<u>X</u>	<u>X</u>
c. Create a potentially substantial fire hazard?	_____	<u>X</u>	<u>X</u>

The proposed project would result in a greater number of people on the site, which would increase the difficulty of evacuating people from the site if an emergency evacuation were required. An evacuation and emergency response plan has been committed to by the project sponsor to mitigate this impact (see p. 25). The building would conform to Life Safety Provisions of the San Francisco Building Code, thereby minimizing potential fire hazards. Because of the mitigation measure proposed as part of the project, this issue will not be discussed in the EIR.

<u>13. Cultural</u>	<u>YES</u>	<u>NO</u>	<u>DISCUSSED</u>
*a. Disrupt or adversely affect a prehistoric or historic archaeological site or a property of historic or cultural significance to a community or ethnic or social group; or a paleontological site except as a part of a scientific study?	_____	<u>X</u>	<u>X</u>
*b. Conflict with established recreational, educational, religious or scientific uses of the area?	_____	<u>X</u>	_____
c. Conflict with preservation of any buildings of City landmark quality?	_____	<u>X</u>	<u>X</u>

The project site contains the Hill Bros. Coffee, Inc. building, a designated City landmark, featuring romanesque architecture. The proposed project would not conflict with the preservation of the existing landmark building, as this building would be retained as part of the project; however, the retention and renovation of the landmark building will be discussed in the EIR.

Portions of the site were part of the historic shoreline of San Francisco. Therefore, historic or cultural resources could be located beneath the site or in the site area. Archaeological resources will be discussed in the EIR.

<u>C. OTHER</u>	<u>YES</u>	<u>NO</u>	<u>DISCUSSED</u>
Require approval of permits from City Departments other than DCP or BBI, or from Regional, State or Federal Agencies?	_____	<u>X</u>	_____

D. MITIGATION MEASURES

	<u>YES</u>	<u>NO</u>	<u>N/A</u>	<u>DISCUSSED</u>
1. If any significant effects have been identified, are there ways to mitigate them?	<u>X</u>	<u> </u>	<u> </u>	<u>X</u>
2. Are all mitigation measures identified below included in the project?	<u>X</u>	<u> </u>	<u> </u>	<u>X</u>

Noise

Operation

- As recommended by the Environmental Protection Element of the San Francisco Comprehensive Plan, an analysis of noise reduction measurements would be prepared by the project sponsor and presented to the Departments of Public Works and City Planning before issuance of permits for new building construction by the Central Permit Bureau. Recommended noise insulation features, including fixed windows and climate control for office space and noise attenuation features for residential open space would be part of the proposed project as necessary to reduce noise levels to those required by State law or recommended in the Comprehensive Plan.

Construction

- The project sponsor would require the contractor to muffle and shield intakes and exhaust of construction equipment, shroud or shield impact tools, and use electric-powered rather than diesel-powered construction equipment, as feasible.
- The project sponsor would require the general contractor to construct barriers around the site and around stationary equipment such as compressors; these barriers could reduce construction noise by as much as five dBA. The sponsor would require the general contractor to locate stationary equipment in pit areas or excavated areas, as these areas would serve as noise barriers.

- The project sponsor would predrill holes for piles in order to minimize noise and vibration from piledriving. The actual pounding from piledriving would occur during a 5 to 15 minute span per pile. The sponsor has agreed to restrict piledriving to hours required by the Department of Public Works.
- The level of vibration in the landmark building would be mechanically monitored during piledriving for the new construction. Should unacceptable levels occur, mitigation measures would be taken, after conferring with the Department of Public Works - Bureau of Engineering, to protect the structure and minimize effects on office workers in the landmark building.
- To reduce construction noise effects in offices at the landmark building, office functions and personnel fronting the construction site would be relocated to less exposed areas of the building. Alternatively, the project sponsor would cover windows fronting the construction site with plywood, plastic, glass or gypsum board, and provide gaskets for entry doors during project construction. The measure selected would depend on the feasibility of relocation of office functions and personnel within the building, and the potential need to maintain openable windows during phases of construction.

Air Quality

Construction

- During excavation, unpaved demolition and construction areas would be wetted down with water to reduce dust emissions; two wettings per day with complete coverage would reduce particulate emissions (dust) by about 50%.
- The sponsor would require the general contractor to maintain and operate construction equipment in such a way as to minimize exhaust emissions. During construction, trucks in loading and unloading queues would turn off their engines to reduce vehicular emissions.

Geology/Topography

- During excavation, the contractor would shore up or otherwise protect the sides of the excavation against lateral movement of soils. If required, the landmark building would be underpinned to prevent structural damage.
- The landmark building would be closely monitored to minimize potential adverse effects such as cracking or tilting during construction.
- The project sponsor has had a geotechnical report prepared for the project by a California-licensed engineer, and would comply with the recommendations of that report for foundation design and site preparation. This measure would reduce the potential for building damage or failure due to geological, soils, or seismic conditions at the site.
- During construction, the contractor would sweep streets adjacent to the construction site mechanically or by hand to prevent siltation of storm drains and generation of dust. The contractor would also confine construction equipment, maintenance, and refueling activities to locations where potential petroleum spillage could be contained.
- Where necessary, the project sponsor would maintain a berm in the excavation between the new construction and the foundations of the existing landmark building.

Water

- The final soils report to be prepared by the California-licensed engineer for this project will address the potential settlement and subsidence impacts of dewatering of the site. Based on the soils report, a determination would be made as to whether or not a lateral and settlement survey should be done to monitor any movement or settlement of surrounding buildings and adjacent streets. If a monitoring survey is recommended, the Department of Public Works would require that a Special Inspector (as defined in Article 3 of the Building Code) will be retained by the project sponsor to perform this monitoring. If, in the judgment of the Special Inspector, unacceptable subsidence were to occur during construction, groundwater recharge would be used to halt this settlement. Costs for the

survey and any necessary repairs to service under the streets would be borne by the contractor.

Hazards

- An evacuation and emergency response plan would be developed by the project sponsor or building management staff, in consultation with the Mayor's Office of Emergency Services, to insure coordination between the City's emergency planning activities and the plan developed for the proposed building. The emergency plan of the proposed building would be reviewed by the Office of Emergency Services and implemented by building management insofar as possible before issuance by the Department of Public Works of final building occupancy permits.

E. MANDATORY FINDINGS OF SIGNIFICANCE	<u>YES</u>	<u>NO</u>	<u>DISCUSSED</u>
*1. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or pre-history?	_____	<u>X</u>	_____
*2. Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?	_____	<u>X</u>	<u>X</u>
*3. Does the project have possible environmental effects which are individually limited, but cumulatively considerable? (Analyze in the light of past projects, other current projects, and probable future projects.)	<u>X</u>	_____	<u>X</u>
*4. Would the project cause substantial adverse effects on human beings, either directly or indirectly?	_____	<u>X</u>	_____
*5. Is there a serious public controversy concerning the possible environmental effect of the project?	_____	<u>X</u>	_____

As required by sections 15126(e) and 15127(a) of the State EIR Guidelines, the EIR will discuss the project's potential to achieve short-term goals to the disadvantage of long term, environmental goals.

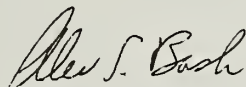
The project would contribute to cumulative transportation impacts in the Rincon Hill area. This issue will be analyzed in the EIR.

F. ON THE BASIS OF THIS INITIAL STUDY:

_____ I find the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared by the Department of City Planning.

_____ I find that although the proposed project could have a significant effect on the environment, there WILL NOT be a significant effect in this case because the mitigation measures, numbers _____ in the discussion, have been included as part of the proposed project. A NEGATIVE DECLARATION will be prepared.

 X I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.



Alec S. Bash
Environmental Review Officer

for

Dean L. Macris
Director of Planning

Date: May 31, 1984

APPENDIX B: ARCHITECTURAL RESOURCES

ARCHITECTURAL EVALUATION SURVEYS

The architectural ratings discussed in the text of this report (see Section III.B. Environmental Setting, pp. 50-53) represent the results of two separate architectural surveys.

SAN FRANCISCO DEPARTMENT OF CITY PLANNING INVENTORY

Between 1974 and 1976, the San Francisco Department of City Planning conducted a citywide inventory of architecturally significant buildings. An advisory review committee of architects and architectural historians assisted in the final determination of ratings for the 10,000 buildings, the results of which were entered in an unpublished 60-volume record of the inventory. The rated buildings are also represented on a set of color-coded maps which identify the location and relative significance of each building surveyed. The inventory and maps are on file at the Department of City Planning.

The inventory assessed the architectural significance of the surveyed structures from the standpoint of overall design and particular design features. Both contemporary and older buildings were included, but historical associations were not considered. Each building was given two numerical ratings, for architectural quality and for overall architectural significance, urban design context, and environmental significance. The latter rating is referred to in this report. The ratings ranged from a low of "0" to a high of "5". The architectural survey resulted in a listing of the best 10% of San Francisco's buildings. In the estimation of the inventory participants, buildings rated "3" or higher represent approximately the best 2% of the City's architecture. A full description of the survey rating system is available at the Department of City Planning, 450 McAllister St.

HERITAGE SURVEY

The Foundation for San Francisco's Architectural Heritage, through its consultants, Charles Hall Page & Associates, Inc., conducted an architectural and historical survey of all downtown structures. In 1979, the original inventory results were published in the book Splendid Survivors (Foundation for San Francisco's Architectural Heritage, Splendid Survivors, California Living Books, San Francisco, 1979). A subsequent 1982 Heritage survey evaluated all structures in the C-3 zoning districts in areas not covered in the Splendid Survivors survey ("San Francisco Downtown Architectural Survey: C-3 Zoning District, Final Evaluated List", December 1, 1982). The expanded inventory has not been formally published by Heritage. Criteria considered in rating the buildings for both surveys include Architectural Significance, Historic Context and Negative Alterations. Summary ratings from "A" to "D" were assigned to each building on the basis of these scores. The summary ratings, as described on pp. 12-13 of Splendid Survivors, are listed below:

- A. "Highest Importance. Individually the most important buildings in downtown San Francisco, distinguished by outstanding qualities of architecture, historical values, and relationship to the environment. All A-group buildings are eligible for the National Register, and of highest priority for City Landmark status."
- B. "Major Importance. Buildings which are of individual importance by virtue of architectural, historical, and environmental criteria. These buildings tend to stand out for their overall quality rather than for any particular outstanding

characteristics. B-group buildings are eligible for the National Register, and of secondary priority for City Landmark status."

The Landmarks Preservation Advisory Board does not distinguish between "A" rated and "B" rated buildings for purposes of preservation.

- C. "Contextual Importance. Buildings which are distinguished by their scale, materials, compositional treatment, cornice and other features. They provide the setting for more important buildings and they add visual richness and character to the downtown area. Many C-group buildings may be eligible for the National Register as part of historic districts."
- D. "Minor or No Importance. Buildings which are insignificant examples of architecture by virtue of original design, or more frequently, insensitive remodeling. This category includes vacant buildings and parking lots. Most D-group buildings are sites of opportunity."

Not Rated. Buildings which have been built or suffered insensitive exterior remodelings since 1945.

ARCHITECTURALLY AND/OR HISTORICALLY SIGNIFICANT BUILDINGS IN THE DOWNTOWN

The City Planning Commission adopted by Resolution No. 8600 (May 29, 1980), a "List of Architecturally and/or Historically Significant Buildings in The Downtown," based on the above described surveys. Generally, buildings rated "3" or higher in the DCP survey or "A" or "B" in the original Heritage survey (Splendid Survivors) were placed on the list. The expanded Heritage survey (1982) has not been adopted by the City Planning Commission to date.

The purpose of the list is to advise developers and building owners of the importance the City places upon the buildings' conservation and to require special review by the Commission of any plans which would affect any building or buildings on the list. Resolution No. 9240 (November 19, 1981) reaffirms the Commission's concern for preservation of architecturally significant buildings and acknowledges the Director's intent to recommend denial of projects that propose to demolish significant buildings. As noted in Section III.B., no buildings on the project site are included on this list.

APPENDIX C: CUMULATIVE OFFICE DEVELOPMENT IN DOWNTOWN SAN FRANCISCO

Process Used to Develop the Cumulative List of Office Projects In Downtown San Francisco:

The attached list of office and retail projects was prepared as a background document for a land use-based method of analyzing cumulative impacts. A land use-based cumulative analysis is one of the two methods of cumulative analyses suggested by the State CEQA Guidelines (Section 15130(b)(1)(A)), whereby a list of related projects is used to determine the combined effects of the whole and to determine the contribution of a proposed office or retail project to the overall cumulative effect. This is only one method of determining cumulative impacts. The other method of determining cumulative impacts is an analysis based on estimates of total employment projected for the area. This latter method is permitted by State Guidelines Section 15130(b)(1)(B) if the employment projections are based on an appropriate planning document.

The attached cumulative list is an expanded version of past lists and includes all office and large retail projects proposed, approved, under construction and recently completed in the greater downtown area which have active applications in the Department of City Planning. This list is appropriate for use only in a land-use based analyses of the cumulative impacts of office/retail projects in the greater downtown.

Relevant Redevelopment Agency projects have been included in the list. The Rincon Point/South Beach Redevelopment Area includes four projects: 77,000 sq. ft. of office space at 181 Steuart Street, 200,000 sq. ft. of office space on First Street, and a 30,000-sq.-ft. office building, all in at least preliminary negotiation stages between the Agency and potential developers; and 453,000 sq. ft. of office space proposed by the U.S. Postal Service at the Rincon Annex site (Source: San Francisco Redevelopment Agency). The listing for the Yerba Buena Gardens in the YBC Redevelopment Area includes 1.2 million sq. ft. of office space in the Olympia and York proposal (Source: San Francisco Redevelopment Agency). Other office buildings in the YBC and applicable parts of the Western Addition Redevelopment Areas are listed under individual building names or addresses, based on information obtained from regular contact with redevelopment agency staff. Other jurisdictions are also contacted when the cumulative list is updated: the new 293,000-sq.-ft. State Office Building under construction at Van Ness and McAllister is included; no Federal office space is proposed in downtown San Francisco in the near future other than that at the Rincon Annex Post Office site in the Rincon Point Redevelopment Area, (Source: John Scales, General Services Administration, telephone conversation, April 11, 1984).

Hotel projects have not been included in the list because hotel uses have different peaking characteristics from office buildings and generally do not significantly affect peak-hour traffic or transit and therefore also do not contribute to effects such as maximum production of air pollutants (see 135 Main Final Supplemental EIR, EE81.61, certified November 30, 1982, p. 150). Residential projects have not been included because residential uses are extremely limited in the study area and generally are unrelated to office uses. Residential travel in the downtown usually takes place in the contra-commute direction during peak hours and thus does not contribute to cumulative traffic or transit congestion. In addition, office trips in the p.m. peak period are assumed to be made by workers traveling to their residences. Trip generation calculated for residential uses includes persons returning to their homes after work in the p.m. peak.

Inclusion in the cumulative analysis of residential uses in downtown San Francisco would double count project-generated travel: once when employees left their office building and again when they arrived at their residence if they lived in the downtown area.

Approximately 1.3 million sq. ft. of office space is proposed for locations outside the greater downtown area. All but two of these projects (San Francisco Executive Park just east of U.S. 101 near the southern border of San Francisco, proposed for about 1.1 million sq. ft., and St. Mary's Medical Office Building on Shrader at Fulton, proposed to be about 90,000 sq. ft.) are under 10,000 sq. ft. These projects are not included on the cumulative list because their impacts do not accumulate measurably with office space in the downtown area. Although the Executive Park proposal would contribute to the auto traffic on U.S. 101, the critical analysis points for p.m. peak-period cumulative downtown traffic on U.S. 101 are the freeway entrances near downtown, the approaches to the Bay Bridge, and the Alemany interchange which restricts southbound U.S. 101 traffic on the p.m. peak period. Executive Park traffic would not contribute measurably to peak demands on freeway entrances near downtown or peak direction at peak period impacts on the Alemany interchange and is factored in as part of the traffic approaching the Bay Bridge before cumulative downtown development is added. (Executive Park Subsequent DEIR, EE81.197E, September 9, 1983. Note that an EIR was prepared in 1976 for a project on this site; following permits for four of the proposed office buildings, the developer made major changes in the project that necessitated a new EIR which is now in progress.)

The Department's Master Project Log contains listings for projects which are no longer active for various reasons, such as no action by project sponsor in over one year, application withdrawn by sponsor, or project proposal revised to non-office or non-retail uses (examples of these projects include 272 Sutter, approximately 65,000 sq. ft., withdrawn by sponsor; 2nd and Harrison, 49,000 sq. ft., application revised from office space to parking lot). Some of these files have not been formally closed due to other higher staff priorities; however, the projects are not included on the cumulative list when staff assigned have concluded that the office project has been abandoned or withdrawn or the scope or nature of the proposal is so uncertain as to be not reasonably foreseeable.

In EIRs prepared during the latter half of 1983, the list used for cumulative analyses included a section labeled 'Completed But Not in Base Case.' As of the end of 1983, that list totaled over 6 million sq. ft. of office space and about 225,000 sq. ft. of retail space (see Table C-1, Projects Completed Before 1984, following page). These projects were included on earlier lists even though they were built and fully or partially occupied because some of the baseline data (measurements of the existing situation) for some transportation systems was collected in about mid-1982 and thus could not include the effects of these projects. The baseline has recently been updated to reflect 1984 for use in the Downtown Plan Draft EIR. Projects completed before 1984 are included in this updated baseline data. Using 1984 as the existing baseline situation means that projects completed by the end of 1983 should be omitted from the list of projects used for cumulative analysis in order to avoid counting effects of the projects twice. Because some of the baseline data previously used was collected more recently than mid-1982, list-based cumulative analyses overestimated some reported impacts by measuring the effects of office buildings as part of the baseline existing situation and by including the same office building in the calculations of future cumulative impacts. For example, PG&E is already serving office buildings completed in 1982 and 1983; including those

TABLE C-1: PROJECTS COMPLETED BEFORE 1984

Assessor's Block Case No.		Project Name	Office		Retail		Date Occu- pied
			(Gross Sq. Ft.)		(Gross Sq. Ft.)		
			Total New Constr.	Net New Constr.	Total New Constr.	Net New Constr.	
Completed But Not In Base Case Analysis							
106	81.415ED	1299 Sansome	41,000	41,000	3,500	3,500	1983
141	81.151EV	100 Broadway	13,000	13,000			1983
163	EE81.1	901 Montgomery	63,000	63,000	18,800	18,800	1983
164	81.631D	847 Sansome	23,750	23,750			1983
164	81.251D	936 Montgomery	21,500	11,500			1983
196		736 Montgomery	40,000	40,000			1983
196	CU79.49	Pacific Lumber Co.	92,000	92,000			1983
206	81.165D	401 Washington/Battery	13,200	13,200	1,800	1,800	1983
228	81.610ED	569 Sacramento (C)	19,000	19,000			1983
237	DR80.6	353 Sacramento (Daon)	277,000	251,000	8,300	-2,000	1983
240	DR80.16	550 Kearny (Addition)	71,400	71,400			1983
263	CU79.12	101 California	1,265,000	1,257,000	24,700	-14,300	1983
287	81.550D	Sloane Building (C)	125,300	125,300	30,000	30,000	1983
292	DR79.13	Crocker National Bank	676,000	495,000	86,000	54,000	1983
312	EE79.370	50 Grant	90,000	90,000			1983
313	EE77.257	Nieman Marcus			143,000	128,000	1982
351	DR79.133	10 U.N. Plaza	92,050	92,050			1983
738	SFRA	One Flynn Center	25,000	25,000			1983
762	SFRA	Opera Plaza (M)	50,000	50,000			1983
3518	81.483V	291 10th St.	25,700	25,700		-25,700	1983
3702	EE81.25	1155 Market/8th	138,700	138,700	8,800	8,800	1983
3708	DR80.34	25 Jessie/Ecker Square	111,000	111,000			1983
3709	DR80.36	Five Fremont Center	791,200	722,200	35,000	17,300	1983
3712	DR79.11	Federal Reserve	640,000	640,000			1983
3717	EE78.413	150 Spear	330,000	330,000			1983
3718	DR79.12	Pacific Gateway	540,000	540,000	7,500	7,500	1983
3724	SFRA	Yerba Buena West	335,000	335,000			1983
3732	81.548DE	466 Clementina (C)	15,150	15,150			1983
3735	SFRA	Convention Plaza	339,000	339,000			1983
3735	SFRA	Planter's Hotel (C)	20,000	20,000			1983
3752	EE77-220	Office Bldg. (YBC SB-1)	11,000	11,000			1983
3763	81.287V	490 2nd at Bryant (C)	40,000	40,000			1983
3763	81.381	480 2nd at Stillman (C)	35,000	35,000			1983
3763	82.384EVD	400 2nd & Harrison	71,500	49,500			1983
3776	81.693EV	539 Bryant/Zoe	63,000	63,000			1983
TOTAL			6,504,450	6,188,450	367,400	227,700	

* (C) - Conversion (generally industrial and/or warehouse to office)

(M) - Mixed Use (office/residential/commercial)

SOURCE: Department of City Planning.

buildings in calculations of future cumulative energy demand would count them twice. Therefore, for some part of the cumulative analyses, omitting projects completed by 1983 will provide more realistic predictions of future conditions.

The Department is aware of proposals by Southern Pacific Land Co. to develop property near China Basin. This area and the proposals by Southern Pacific have been called "Mission Bay." An application for environmental review was filed for the project over one year ago but was withdrawn in early 1984 and no new application has been filed. Since withdrawal of this application, members of the San Francisco Board of Supervisors have proposed that the City purchase all or portions of the property; this proposal was later dropped. In July 1984, Southern Pacific announced major revisions in its proposal reducing the scope of the development proposal. No new applications have been filed. Both the original project and the July 1984 proposal would require environmental analyses and Zoning Map and Comprehensive Plan amendments, and BCDC and possibly U.S. Army Corps of Engineers permits in addition to City approvals before any building could begin. With no application pending, and with the possibility of further revisions by the developer before submittal of any application, the Mission Bay project remains too speculative to include any cumulative analyses.

The Department of City Planning is in the process of preparing plans and environmental analyses for several areas in or near the downtown. Because these plans involve only proposals for zoning and other land use controls, they are not properly part of any cumulative list. Although analyses for these plans sometimes predict amounts of office space that could be built in the area being studied, the predictions are for purposes of assessing impacts of the plans and in no way reflect proposed future development.

Use of the Department's list for estimating cumulative impacts builds in certain limitations. It assumes, for example, that all proposals will be built at essentially the size proposed and that all buildings once built will be fully occupied. It is important to note that the cumulative list has not been adjusted to reflect temporary limitations on growth impacts by the City's actions to establish a Special Use District in the South of Market and a moratorium on new office and hotel space over 50,000 sq. ft. Nor has any adjustment been made to account for reduced building potential as proposed in the Downtown Plan (base FAR of 14:1 reduced to 10:1). Thus, the total square footages on the list of projects under formal review may be overestimated, and impacts based on the square footages may also be overestimated, if some buildings are not built, not fully occupied, or reduced in size.

TABLE C-2: CUMULATIVE OFFICE DEVELOPMENT IN DOWNTOWN SAN FRANCISCO AS OF MARCH 10, 1984

Block	Case No.	Project Name	Office		Retail	
			(Gross Sq. Ft.)		(Gross Sq. Ft.)	
			Total New Constr.	Net New Constr.	Total New Constr.	Net New Constr.
Downtown Office Projects Under Formal Review						
59	83.177E	1620 Montgomery	82,270	45,390		
110	82.129E	1000 Front	139,000	139,000	3,000	3,000
112	83.447E	1100 Sansome	55,000	48,000		
113	8206460S	1171 Sansome	30,000	30,000		
113	82.418E	220 Green	3,520	3,520		
130	83.612C	1558 Powell	2,500	2,500		
136	83.476V	962 Battery	15,000	15,000		
192	83.412ED	1055 Stockton			81,500	66,500
194	83.128E	732 Washington	17,500	17,500	11,240	11,240
195	82.643E	660 Washington	3,938	3,938		
227	82.463E	505 Montgomery	327,300	300,670	12,100	-4,775
228	83.422E	560 Sacramento	48,000	31,000		
229	83.222EC	Embarcadero West	575,000	382,000	9,000	9,000
236	82.511E	222 Front	40,250	33,400	3,250	-0-
258	82.421E	Pine/Kearny	186,000	186,000	6,750	6,750
266	83.420ED	98 Battery	169,000	106,500		
267	83.421ED	225 Pine	134,000	134,000		
287	83.91ED	237 Kearny/Bush	99,600	87,800	6,100	2,400
288	83.148E	665 Bush (M)	12,400	2,600		-2,700
309	83.333E	212 Stockton	32,220	15,885	21,700	16,200
326	8312187	156 Ellis	3,200	3,200		
327	82.445E	Stockton/O'Farrell	43,300	25,750	57,950	28,000
331	81.448E	Mixed Use Development	50,000	50,000	70,000	49,000
336	83.21ECV	440 Turk	25,000	8,150		
642	83.218V	1699 Van Ness	20,000	20,000		
814	81.540E	101 Hayes	132,000	132,000	6,000	6,000
3526	83.475V	530-550 9th	42,300	42,300		
3702	83.196E	1169 Market, Trinity	820,000	805,000	40,000	40,000
3704	83.404	901 Market Penney's	145,500	126,000	80,000	80,000
3705	83.314E	5th and Market	880,000	778,000	120,000	40,000
3707	SFRA	YBC Office Bldg.	593,000	593,000		
3708	81.297ED	562 Mission	405,000	265,000	10,000	10,000
3708	83.75E	49 Stevenson	169,600	136,900	9,800	-2,900
3721	83.331E	100 First @ Mission	348,920	342,000		
3721	83.40EZD	524 Howard	279,000	279,000	15,000	15,000
3735	83.313E	35 Hawthorne	47,400	47,400	2,900	2,900
3736	83.311E	299 2nd @ Folsom	206,000	171,000	10,000	10,000
3744	84.41E	Hills Bros.	635,000	535,000	40,000	40,000

(continued on next page)

TABLE C-2: CUMULATIVE OFFICE DEVELOPMENT IN DOWNTOWN SAN FRANCISCO AS OF MARCH 10, 1984 (continued)

Block	Case No.	Project Name	Office		Retail	
			(Gross Sq. Ft.)		(Gross Sq. Ft.)	
			Total	Net	Total	Net
			New	New	New	New
			Constr.	Constr.	Constr.	Constr.
<u>Downtown Office Projects Under Formal Review</u>						
3749	83.464EV	50 Guy Place	17,500	17,500		
3752	83.310E	837 Folsom	200,000	200,000		
3769	83.213EV	59 Harrison	113,500	49,750		
3776	83.451E	501 Bryant	67,000	35,000	14,000	4,000
3778	83.547E	775 Bryant	27,890	27,890	3,675	3,675
3786	82.33E	655 5th/Townsend	126,250	126,250		
3786	83.272EV	525 Brannan	13,500	13,500		
3788	82.352EV	640 2nd	39,100	37,400		
3789	82.31EV	615 2nd/Brannan (C)	90,000	70,000	9,300	9,300
3794	83.545V	139 Townsend	51,200	50,000		
3923	81.491EVF	1550 Bryant	80,600	49,600		
-	SFRA	Yerba Buena Gardens	1,340,000	1,340,000		
-	SFRA	Rincon Point/S. Beach	760,000	760,000		
TOTAL UNDER FORMAL REVIEW			9,744,260	8,721,295	643,265	442,590

Major Downtown Office Projects; Approved, Not Yet Under Construction

65	82.168V	990 Columbus	12,000	12,000		
112	81.258	Ice House (C)	209,000	209,000		
164	81.583D	50 Osgood Place	22,500	22,500	9,100	9,100
176	83.229E	801 Montgomery	31,800	31,800	6,200	6,200
176	82.368E	900 Kearny	25,000	25,000	5,000	5,000
225	81.403ED	814 Stockton	3,500	3,500	3,300	3,300
265	81.195ED	388 Market at Pine (M)	234,500	85,500	10,000	-8,500
268	81.422D	250 Montgomery at Pine	105,700	65,700	8,000	8,000
271	83.13E	582 Bush	18,100	18,100	800	800
288	81.687ED	222 Kearny/Sutter	150,000	49,950	10,000	-8,400
294	82.87D	44 Campton Place	7,600	7,600		
642	82.224VEC	1750 California	82,525	82,525		
669	81.667ED	1361 Bush	13,000	13,000		
671	82.24V	1581 Bush (C)	16,000	16,000		
690	SFRA	Post/Van Ness	88,000	88,000		
716	81.581ED	Polk/O'Farrell (M)	61,600	61,600	22,400	22,400
818	83.94EV	583-591 Hayes (C)	4,900	4,900		
3504	82.137V	44 Gough (C)	30,000	30,000		

(continued on next page)

TABLE C-2: CUMULATIVE OFFICE DEVELOPMENT IN DOWNTOWN SAN FRANCISCO AS OF MARCH 10, 1984 (continued)

Block	Case No.	Project Name	Office		Retail	
			(Gross Sq. Ft.)		(Gross Sq. Ft.)	
			Total	Net	Total	Net
			New	New	New	New
			Constr.	Constr.	Constr.	Constr.
Major Downtown Office Projects; Approved, Not Yet Under Construction						
3702	81.549ED	1145 Market	137,500	108,500	8,000	8,000
3705	80.315	Apparel Mart III	332,400	332,400		
3707	81.492ED	90 New Montgomery	124,300	124,300	3,350	3,350
3707	81.245DA	New Montgomery Pl.	227,500	209,700	2,200	-3,900
3708	81.493ED	71 Stevenson	324,600	324,600	6,200	6,200
3709	81.113ED	Central Plaza	353,100	136,300	17,400	17,400
3717	81.183E	123 Mission	342,800	342,800		
3724	81.102E	Holland Ct. (C)	27,850	27,850		
3729	82.86D	774 Tehama	5,800	5,800		
3733	EE81.2	868 Folsom	65,000	65,000		
3733	82.29E	832 Folsom	50,000	50,000		
3735	SFRA	75 Hawthorne (C)	61,900	61,900		
3738	DR80.5	315 Howard	294,000	294,000	3,200	3,200
3749	EE81.18	Marathon - 2nd & Folsom	686,700	686,700	35,300	35,300
3750	82.241E	600 Harrison	228,000	228,000	10,000	10,000
3750	82.77V	642 Harrison (C)	54,400	45,900		
3764	82.591E	Second St. Sq. (C)*	333,000	263,000	25,000	25,000
3775	81.147V	338-340 Brannan (C)	36,000	36,000		
3776	EE81.59	Welsh Commons (M)	55,600	55,600	12,000	12,000
3788	81.296Z	690 2nd/Townsend (C)	16,600	16,600	16,000	16,000
3789	81.552EV	625 2nd/Townsend (C)	157,000	157,000		
3794	81.569EV	123 Townsend	104,000	49,500		
3794		155 Towsend	19,000	19,000		
3803	81.244D	China Basin Expansion	196,000	196,000		
9900	81.63E	Ferry Building Rehab.	309,500	97,500	163,500	124,000
TOTAL APPROVED				5,658,275	4,760,625	376,950
294,450						

Major Downtown Office Projects Under Construction

58	82.234E	Roundhouse (C)	45,000	45,000	3,000	3,000
136	81.243E	955 Front/55 Green	50,000	50,000		
143	81.353ED	1000 Montgomery (C)	39,000	39,000		
146	83.99EC	644 Broadway	42,800	42,800		
161	DR80.191	Mirawa Center	36,000	36,000	30,650	30,650
166	DR80.15	750 Battery	105,400	105,400	12,800	12,800
166	CU81.7	222 Pacific at Front (C)	142,000	142,000		

(continued on next page)

TABLE C-2: CUMULATIVE OFFICE DEVELOPMENT IN DOWNTOWN SAN FRANCISCO AS OF MARCH 10, 1984 (continued)

Block	Case No.	Project Name	Office		Retail	
			(Gross Sq. Ft.)		(Gross Sq. Ft.)	
			Total	Net	Total	Net
			New	New	New	New
			Constr.	Constr.	Constr.	Constr.
Major Downtown Office Projects Under Construction						
167	SFRA	Golden Gateway III	103,000	103,000		
176	81.673EACV	Columbus/Pacific (Savoy)	49,000	49,000	22,000	22,000
208	81.104EDC	Washington/Montg. (M)	235,000	233,300	4,000	-1,200
227	EE80.296	Bank of Canton	230,500	177,500		-800
239	DR80.1	456 Montgomery	160,550	160,550	24,250	24,250
240	81.705ED	580 California/Kearny	329,500	260,000	6,500	6,500
261	81.249ECQ	345 California (M)	640,000	466,500	15,500	15,500
262	81.206D	130 Battery	41,000	41,000		
270	81.175ED	466 Bush	86,700	86,700	7,800	2,200
271	81.517	453 Grant	27,500	27,500	6,200	6,200
288	81.461EC	333 Bush (Campeau) (M)	498,400	458,100	20,900	20,900
288	DR80.24	101 Montgomery	264,000	234,000	4,900	-14,100
289	81.308D	One Sansome	603,000	603,000	7,000	7,000
311	82.120D	S.F. Federal	246,800	218,850	1,600	-9,440
351	DR79.24	Mardikian/1170 Market	40,000	40,000		
641	82.200CV	1735 Franklin (C)	8,600	8,600		
672	SFRA	Wealth Investments	104,500	104,500		
743	SFRA	Van Ness/Turk (Vanguard)	85,000	85,000		
767	STATE	State Office Building	293,300	293,300		
816	82.212ED	300-350 Gough (M/C)	16,000	16,000		
834	82.603E	25 Van Ness (C)	101,800	42,800	36,400	36,400
3512	82.14	Van Ness Plaza	170,000	170,000	6,000	6,000
3715	82.16EC	121 Steuart	33,200	33,200		
3715		141 Steuart	80,000	80,000		
3717	EE79.236	101 Mission	219,350	219,350		
3717	EE80.349	Spear/Main (160 Spear)	279,000	279,000	7,600	7,600
3717	82.82D	135 Main	260,000	260,000	4,000	4,000
3722	81.417ED	144 Second at Minna	30,000	30,000		
3741	82.203C	201 Spear	229,000	229,000	5,200	5,200
3787	81.306	252 Townsend at Lusk	61,000	61,000		
TOTAL UNDER CONSTRUCTION			5,985,900	5,530,950	226,300	184,660
GRAND TOTAL (ALL PROJECTS)			21,388,430	19,012,870	1,246,515	921,700

* (C) - Conversion (generally industrial and/or warehouse to office)

(M) - Mixed Use (office/residential/commercial)

SOURCE: Department of City Planning

TABLE C-3: MAJOR OFFICE BUILDING CONSTRUCTION IN SAN FRANCISCO THROUGH 1983, IN GROSS SQUARE FEET

<u>Year</u>	<u>Total Gross Sq. Ft. Completed</u>	<u>5-Year Total (Net)/a/</u>	<u>5-Year Annual Average (Net)/a/</u>	<u>Cumulative Total of All Office Buildings</u>	<u>Cumulative Total of All Downtown Office Buildings</u>
<u>Pre-1960</u>				28,145,000 /b/	24,175,000 /c/
1960	1,183,000				
1961	270,000				
1962	--				
1963	--				
1964	1,413,000				
		<u>1,866,000</u>	<u>573,200</u>		
1960-1964		(2,580,000)	(516,000)	30,725,000	26,754,000
1965	1,463,000				
1966	973,000				
1967	1,453,000				
1968	1,234,000				
1969	3,256,000				
		<u>8,379,000</u>	<u>1,675,800</u>		
1965-1969		(7,541,000)	(1,508,000)	38,266,000	34,295,000
1970	1,853,000				
1971	--				
1972	1,961,000				
1973	2,736,000				
1974	2,065,000				
		<u>8,615,000</u>	<u>1,723,000</u>		
1970-1974		(7,753,000)	(1,550,000)	46,019,000	42,048,000
1975	536,000				
1976	2,429,000				
1977	2,660,000				
1978	--				
1979	2,532,000				
		<u>8,157,000</u>	<u>1,631,400</u>		
1975-1979		(7,341,000)	(1,468,000)	53,360,000	49,389,000

(Continued)

TABLE C-3: MAJOR OFFICE BUILDING CONSTRUCTION IN SAN FRANCISCO THROUGH 1983, IN GROSS SQUARE FEET (Continued)

<u>Year</u>	<u>Total Gross Sq. Ft. Completed</u>	<u>5-Year Total (Net)/a/</u>	<u>5-Year Annual Average (Net)/a/</u>	<u>Cumulative Total of All Office Buildings</u>	<u>Cumulative Total of All Downtown Office Buildings</u>
1980	1,284,000				
1981	3,029,000				
1982	3,771,000				
1983	4,108,000				
		<u>12,192,000/d/</u>	<u>3,048,000/d/</u>		
1980-1983		(10,972,800)/d/	(2,743,200)/d/	65,552,000	60,144,000

/a/ Net equals 90% of gross. Net new space is added at an increase factor of 90%, since it is assumed that space equal to 10% of a new building is demolished to make land available for the new replacement building.

/b/ Source: San Francisco Downtown Zoning Study, Working Paper No. 1, January 1966, Appendix Table I, Part I. For pre-1965, data include the area bounded by Vallejo, Franklin, Central Skyway, Bryant and Embarcadero. Also includes one-third of retail-office mixed use. For post-1964, data include the entire city.

/c/ Gross Floor Space for downtown offices are included for the following functional areas: Financial, Retail, Hotel, Jackson Square, Golden Gateway, Civic Center, South of Market, and Outer Market Street as defined in the cited January 1966 report. For post-1964, the entire area east of Franklin St. is included.

/d/ Four-year total and average.

SOURCE: Department of City Planning, March 15, 1983, and July 16, 1984.

APPENDIX D: TRANSPORTATION

PEDESTRIAN ANALYSIS

The pedestrian analysis has been conducted following methods developed by Pushkarev and Zupan in Urban Space for Pedestrians (MIT Press, 1975). Table D-1 shows the relationship between pedestrian flow rates and the flow regimes (categories) used to describe levels of operation. Figure D-1 shows photographs of pedestrian conditions that correspond to the flow regimes.

TABLE D-1: PEDESTRIAN FLOW REGIMEN

<u>FLOW REGIME/a/</u>	<u>CHOICE</u>	<u>CONFLICTS</u>	<u>FLOW RATE (p/f/m)/b/</u>
Open	Free Selection	None	less than 0.5
Unimpeded	Some Selection	Minor	0.5 to 2.0
Impeded	Some Selection	High Indirect Interaction	2.1 to 6.0
Constrained	Some Restriction	Multiple	6.1 to 10.0
Crowded	Restricted	High Probability	10.1 to 14.0
<u>Design Limit - Upper Limit of Desirable Flow</u>			
Congested	All Reduced	Frequent	14.1 to 18.0
Jammed	Shuffle Only	Unavoidable	Not applicable/c/

/a/ Photographs of these conditions are shown in Figure D-1.

/b/ P/F/M = Pedestrians per foot of effective sidewalk width per minute.

/c/ For Jammed Flow, the (attempted) flow rate degrades to zero at complete breakdown.

SOURCE: Urban Space for Pedestrians, MIT Press, 1975, Cambridge, MA.



The borderline between IMPEDED and UNIMPEDED FLOW, with about 130 sq ft (12 m²) per person, or a flow rate of about 2 people per min per ft (6.5 per m) of walkway width. Individuals as well as couples visible in this view have a choice of speed and direction of movement. This rate of flow is recommended for design of outdoor walkways in office districts and other less dense parts of downtown areas.



The midpoint of the IMPEDED FLOW range, with about 75 sq ft (6.9 m²) per person, or a flow rate of about 4 people per min per ft (13 per m) of walkway width. Physical conflicts are absent, but pedestrian navigation does require constant indirect interaction with others. This rate of flow is recommended as an upper limit for the design of outdoor walkways in shopping districts and other dense parts of downtown areas.



The uneven nature of UNIMPEDED FLOW. While the people walking in the plaza—which is 17 ft (5.2 m) wide, compared to 23 ft (7 m) in the preceding picture—have almost 130 sq ft (12 m²) per person on the average, the space allocation for the eight individuals in the foreground is closer to 70 sq ft (6.4 m²). Thus, indirect interaction with others is still quite frequent in the upper range of UNIMPEDED FLOW.



Lower range of UNIMPEDED movement, approaching OPEN FLOW. About 350 sq ft (32.2 m²) per person, or a flow rate of less than 1 person per min per ft (3.3 per m) of walkway width. Complete freedom to select the speed and direction of movement; individuals behave quite independently of each other. For a design standard based solely on pedestrian density, this amount of space can be considered excessive.

FIGURE D-1

PHOTOS OF PEDESTRIAN FLOW LEVEL

SOURCE: PUSHKAREV AND ZUPAN

JAMMED FLOW. Space per pedestrian in this view is about 3.8 sq ft (0.35 m²). This is representative of the lower half of the speed-flow curve, where only shuffling movement is possible and even the extremely un-

comfortable maximum flow rate of 25 people per min per ft (82 per m) of walkway width cannot be attained due to lack of space. Photograph by Louis B. Schlivek.



The threshold of **CONGESTED FLOW**. The first eleven people in the view have about 16 sq ft (1.5 m²) per person, corresponding to a flow rate of about 15 people per min per ft (49 per m) of walkway width. The beginnings of congestion are evident in bodily conflicts affecting at least three of the walkers, and in blocked opportunities for walking at a normal pace.



The onset of **CROWDED FLOW**, with an average of about 24 sq ft (2.2 m²) per person, or a flow rate of about 10 people per min per ft (33 per m) of walkway width. Choice of speed is partially restricted, the probability of conflicts is fairly high, passing is difficult. Voluntary groups of two, of which two can be seen in the picture, are maintained, but cause interference. Note also some overflow into the vehicular roadway in the background.



The midpoint of the **CONSTRAINED FLOW** range, with about 30 sq ft (2.8 m²) per person, or a flow rate of about 8 people per min per ft (26 per m) of walkway width. The choice of speed is occasionally restricted, crossing and passing movements are possible, but with interference and with the likelihood of conflicts. The man in the dark suit seems to be able to cross in front of the two women in the foreground quite freely, but in the background near the curb people are having difficulty with passing maneuvers.

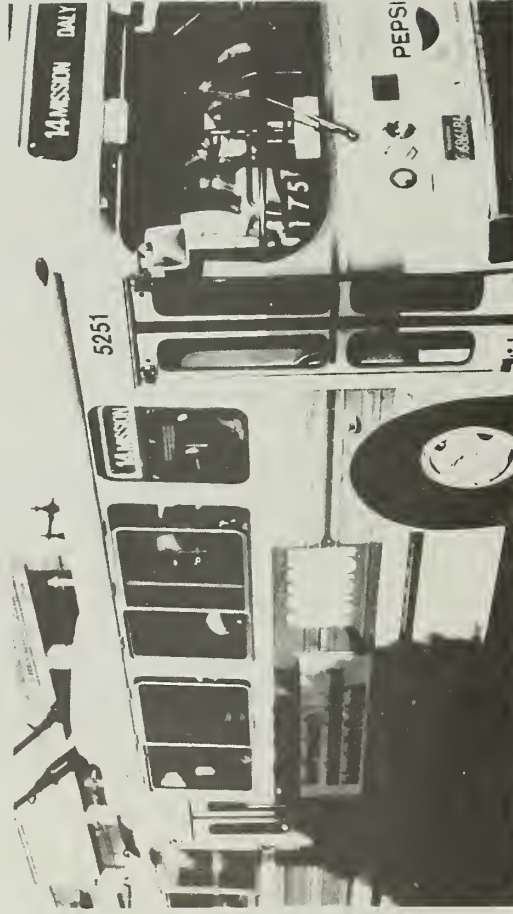
TABLE D-2: PASSENGER LEVELS OF SERVICE ON BUS TRANSIT

<u>Level of Service</u>	<u>Description</u>	<u>Passengers per Seat</u>
A	Level of Service A describes a condition of excellent passenger comfort. Passenger loadings are low with less than half the seats filled. There is little or no restriction on passenger maneuverability. Passenger loading times do not affect scheduled operation.	0.00- 0.50
B	Level of Service B is in the range of passenger comfort with moderate passenger loadings. Passengers still have reasonable freedom of movement on the transit vehicle. Passenger loading times do not affect scheduled operations.	0.51- 0.75
C	Level of Service C is still in the zone of passenger comfort, but loadings approach seated capacity and passenger maneuverability on the transit vehicle is beginning to be restricted. Relatively satisfactory operating schedules are still obtained as passenger loading times are not excessive.	0.76- 1.00
D	Level of Service D approaches uncomfortable passenger conditions with tolerable numbers of standees. Passengers have restricted freedom to move about on the transit vehicle. Conditions can be tolerated for short periods of time. Passenger loadings begin to affect schedule adherence as the restricted freedom of movement for passengers requires longer loading times.	1.01- 1.25
E	Level of Service E passenger loadings approach manufacturers' recommended maximums and passenger comfort is at low levels. Freedom to move about is substantially diminished. Passenger loading times increase as mobility of passengers on the transit vehicle decreases. Scheduled operation is difficult to maintain at this level. Bunching of buses tends to occur which can rapidly cause operations to deteriorate.	1.26- 1.50
F	Level of Service F describes crush loadings. Passenger comfort and maneuverability is extremely poor. Crush loadings lead to deterioration of scheduled operations through substantially increased loading times.	1.51- 1.60

SOURCE: Environmental Science Associates, Inc. from information in the Interim Materials on Highway Capacity, Transportation Research Circular 212, pp. 73-113, Transportation Research Board, 1980.



M OCEAN VIEW - CIVIC CENTER STATION
Wednesday, September 9, 1981 - 8:20 A.M. - Inbound



14 MISSION - MISSION STREET AND SOUTH VAN NESS AVE.
Tuesday, September 29, 1981 - 5:45 P.M. - Outbound



L TARAVAL - VAN NESS STATION
Wednesday, September 16, 1981 - 4:50 P.M. - Outbound



N JUDAH - DUBOCE AND CHURCH
Wednesday, June 8, 1983 - 8:00 A.M. - Inbound

FIGURE D-2
PHOTOS OF MUNI PEAK LOADING CONDITIONS

SOURCE: ESA



K INGLESIDE - VAN NESS STATION
Wednesday, September 9, 1981 - 8:00 A.M. - Inbound



N JUDAH - VAN NESS STATION
Wednesday, September 16, 1981 - 5:00 P.M. - Outbound



38 GEARY - VAN NESS AVE. AND O'FARRELL ST.
Wednesday, October 21, 1981 - 9:00 A.M. - Inbound



38 GEARY - VAN NESS AVE. AND GEARY BLVD.
Wednesday, October 21, 1981 - 4:20 P.M. - Outbound

FIGURE D-2(CONTINUED)
PHOTOS OF MUNI PEAK LOADING CONDITIONS

SOURCE: ESA



30X MARINA EXPRESS - BAYSHORE AVE. AND ARIETA AVE.
Wednesday, October 7, 1981 - 8:00 A.M. - Inbound



J CHURCH - CHURCH ST. AND DUBOCE AVE.
Tuesday, September 29, 1981 - 9:00 A.M. - Inbound

FIGURE D-2(CONTINUED)
PHOTOS OF MUNI PEAK LOADING CONDITIONS

INTERSECTION ANALYSIS

The capacity analysis of each intersection at which a turning movement count was made utilized the "critical lane" method. This method of capacity calculation is a summation of maximum conflicting approach lane volumes that gives the capacity of an intersection in vehicles per hour per lane. (This method is explained in detail in an article entitled "Intersection Capacity Measurement Through Critical Movement Summations: A Planning Tool," by Henry B. McNerney and Stephen G. Peterson, January 1971, Traffic Engineering. This method is also explained in "Interim Materials on Highway Capacity", Transportation Research Circular No. 212, Transportation Research Board, January 1980). The maximum service volume for Level of Service E was assumed as intersection capacity. A service volume is the maximum number of vehicles that can pass an intersection during a specified time period in which operating conditions are maintained corresponding to the selected and specified Level of Service (see Table D-3). For each intersection analyzed, the existing peak-hour volume was computed and a volume-to-capacity (v/c) ratio was calculated by dividing the existing volume by the capacity at Level of Service E.

TABLE D-3: VEHICULAR LEVELS OF SERVICE AT SIGNALIZED INTERSECTIONS

<u>Level of Service</u>	<u>Description</u>	<u>Volume/Capacity (v/c) Ratio/a/</u>
A	Level of Service A describes a condition where the approach to an intersection appears quite open and turning movements are made easily. Little or no delay is experienced. No vehicles wait longer than one red traffic signal indication. The traffic operation can generally be described as excellent.	less than 0.60
B	Level of Service B describes a condition where the approach to an intersection is occasionally fully utilized and some delays may be encountered. Many drivers begin to feel somewhat restricted within groups of vehicles. The traffic operation can generally be described as very good.	0.61-0.70
C	Level of Service C describes a condition where the approach to an intersection is often fully utilized and back-ups may occur behind turning vehicles. Most drivers feel somewhat restricted, but not objectionably so. The driver occasionally may have to wait more than one red traffic signal indication. The traffic operation can generally be described as good.	0.71-0.80
D	Level of Service D describes a condition of increasing restriction causing substantial delays and queues of vehicles on approaches to the intersection during short times within the peak period. However, there are enough signal cycles with lower demand such that queues are periodically cleared, thus preventing excessive back-ups. The traffic operation can generally be described as fair.	0.81-0.90
E	Capacity occurs at Level of Service E. It represents the most vehicles that any particular intersection can accommodate. At capacity there may be long queues of vehicles waiting up-stream of the intersection and vehicles may be delayed up to several signal cycles. The traffic operation can generally be described as poor.	0.91-1.00
F	Level of Service F represents a jammed condition. Back-ups from locations downstream or on the cross street may restrict or prevent movement of vehicles out of the approach under consideration. Hence, volumes of vehicles passing through the intersection vary from signal cycle to signal cycle. Because of the jammed condition, this volume would be less than capacity.	1.01+

/a/ Capacity is defined as Level of Service E.

SOURCE: San Francisco Department of Public Works, Traffic Division, Bureau of Engineering from Highway Capacity Manual, Highway Research Board, 1965

TABLE D-4: TRAFFIC LEVELS OF SERVICE FOR FREEWAYS

Level of Service	Description	Volume/Capacity (v/c) Ratio/a/
A	Level of Service A describes a condition of free flow, with low volumes and high speeds. Traffic density is low, with speeds controlled by driver desires, speed limits, and physical roadway conditions. There is little or no restriction in maneuverability due to the presence of other vehicles, and drivers can maintain their desired speeds with little or no delay.	0.00-0.60
B	Level of Service B is in the higher speed range of stable flow, with operating speeds beginning to be restricted somewhat by traffic conditions. Drivers still have reasonable freedom to select their speed and lane of operation. Reductions in speed are not unreasonable, with a low probability of traffic flow being restricted.	0.61-0.70
C	Level of Service C is still in the zone of stable flow, but speeds and maneuverability are more closely controlled by the higher volumes. Most of the drivers are restricted in their freedom to select their own speed, change lanes, or pass. A relatively satisfactory operating speed is still obtained.	0.71-0.80
D	Level of Service D approaches unstable flow, with tolerable operating speeds being maintained though considerably affected by changes in operating conditions. Fluctuations in volume and temporary restrictions to flow may cause substantial drops in operating speeds. Drivers have little freedom to maneuver, and comfort and convenience are low, but conditions can be tolerated for short periods of time.	0.81-0.90
E	Level of Service E cannot be described by speed alone, but represents operations at even lower operating speeds (typically about 30 to 35 mph) than in Level D, with volumes at or near the capacity of the highway. Flow is unstable, and there may be stoppages of momentary duration.	0.91-1.00
F	Level of Service F describes forced flow operation at low speeds (less than 30 mph), in which the freeway acts as storage for queues of vehicles backing up from a restriction downstream. Speeds are reduced substantially and stoppages may occur for short or long periods of time because of downstream congestion. In the extreme, both speed and volume can drop to zero.	1.00+

/a/ Capacity is defined as Level of Service E.

SOURCE: Environmental Science Associates, Inc. from information in the Highway Capacity Manual, Special Report 87, Highway Research Board, 1965.

APPENDIX E: AIR QUALITY

Table E-1 has been revised with new table per Downtown Plan Comments and Responses.

APPENDIX E-1: SAN FRANCISCO AIR POLLUTANT SUMMARY 1981-1983

STATION: 900 23rd Street, San Francisco

<u>POLLUTANT:</u>	<u>STANDARD</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>
OZONE (O₃) (Oxidant)				
1-hour concentration, ppm/a/				
Highest hourly average	0.10 /b/ 0.12 /c/	0.07	0.08	0.13
Number of excesses of state standard		0	0	1
Expected Annual Excess (national)/d/		0.0	0.0	0.3
CARBON MONOXIDE (CO)				
1-hour concentration, ppm				
Highest hourly average	20 /b,e/	8	12	7
Number of excesses of standard		0	0	0
8-hour concentration, ppm				
Highest 8-hour average	9 /b,c/	5.3	9.1	5.1
Number of excesses of standard		0	1	0
TOTAL SUSPENDED PARTICULATE (TSP)				
24-hour concentration, ug/m ³ /a/				
Highest 24-hour average	100 /b,f/	103	126	117
Number of excesses of standard/g/		1	3	4
Annual concentration, ug/m ³				
Annual Geometric Mean	60 /b,f/	56	57	55
Annual excess of standard		No	No	No
LEAD (Pb)				
30-day concentration, ug/m ³				
Highest 30-day average	1.5 /b/	0.6	0.7	0.4
Number of excesses of standard		0	0	0
NITROGEN DIOXIDE (NO₂)				
1-hour concentration, ppm				
Highest hourly average	0.25 /b/	0.11	0.13	0.13
Number of excesses of standard		0	0	0
SULFUR DIOXIDE (SO₂)				
24-hour concentration, ppm				
Highest 24-hour average	0.05 /b/	0.016	0.012	0.018
Number of excesses of standard/g,h/		0	0	0

/a/ ppm: parts per million. ug/m³: micrograms per cubic meter.

/b/ State standard, not to be equaled or exceeded, except for CO standards, which are not to be exceeded.

(Continued)

APPENDIX E-1: SAN FRANCISCO AIR POLLUTANT SUMMARY 1981-1983 (Continued)

/c/ National standard, not to be exceeded more than once per year, except for annual standards, which are not to be exceeded.

/d/ Expected Annual Excess is a three-year average of annual excesses of the national standard.

/e/ The state one-hour CO standard was revised from 35 ppm to 20 ppm in January 1983. The national one-hour standard remains 35 ppm.

/f/ CARB has redefined the state particulate standard to apply to "inhalable" particulates only (i.e., those which have a diameter less than ten microns). The new standards are 50 ug/m³ for 24-hour averages and 30 ug/m³ for the annual geometric mean. No data is currently available on the particle size distribution of the TSP sampled at the San Francisco monitoring station. According to CARB, however, the new standards are "reasonably equivalent" to the old standards shown in the table above.

/g/ Number of observed excess days (measurements taken once every six days).

/h/ Exceeding the SO₂ standard is a violation only if a concurrent excess of the state ozone or TSP standards occurs at the same station. Otherwise, the national standard of 0.14 ppm applies.

SOURCE: BAAQMD, 1981 - 1983, Air Quality in the San Francisco Bay Area; and CARB, 1981 - 1983, California Air Quality Data.

APPENDIX F: APPLICABLE CRITERIA FOR PLANNED UNIT DEVELOPMENTS/1/

The City Planning Commission, under Section 304 of the City Planning Code, may authorize Planned Unit Developments as conditional uses. "After review of any proposed development, the City Planning Commission may authorize such development as submitted or may modify, alter, adjust or amend the plan before authorization, and in authorizing it may prescribe other conditions as provided in Section 303(d). The development as authorized shall be subject to all conditions so imposed and shall be excepted from other provisions of this Code only to the extent specified in the authorization." The San Francisco City Planning Code sets forth the criteria and limitations a project proposed as a Planned Unit Development must meet in addition to the criteria applicable to conditional uses (Section 303c). The proposed development must:

- "1. Affirmatively promote applicable objectives and policies of the Master Plan;
3. Provide open space usable by the occupants, and where appropriate, by the general public, at least equal to the open spaces required by this code;
6. Under no circumstances be excepted from any height limit established by Article 2.5 of this Code, unless such exception is explicitly authorized by the terms of this Code. In the absence of such an explicit authorization, exceptions from the provisions of this Code with respect to height shall be confined to minor deviations from the provisions for measurement of height in Sections 260 and 261 of this Code, and no such deviation shall depart from the purposes or intent of those sections."

In addition, Planned Unit Developments must be "on sites of considerable size (1/2 acre or more), developed as integrated units and designed to produce an environment of stable and desirable character which will benefit the occupants, the neighborhood and the city as a whole. In cases of outstanding over-all design, complementary to the design and values of the surrounding area, such a project may merit a well reasoned modification of certain of the provisions contained elsewhere in this Code. The tract or parcel of land involved must be . . . in one ownership"

NOTE - Appendix F

/1/ City Planning Code, Article 3, Section 304.

